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Hearings. v. 5-6, 1960.



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ROYAL COMMISSION

ON

COAL

UNCORRECTED TRANSCRIPT
Royal Commission on Coal (1959)

HEARINGS

HELD AT

HALIFAX
Nova Scotia

VOLUME No.:

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DATE:

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ROYAL COMMISSION ON COAL

Proceedings of hearings
held in the Red Room,
Province House, Halifax,
N.S., on the 11th day
of March, 1960.

HON. I. C. RAND, Q.C., Chairman

DR. A. E. CAMERON, Technical Advisor
to the Commission

COMMISSION COUNSEL

Mr. W. D. D. Gunn, Q.C.

Mr. W. Keith Buck

Secretary

Mr. J. J. Ellis

Administrative
Officer



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1 MR. ELLIS: Gentlemen, may we come to order, please.
2 Mr. Commissioner, I have the pleasure to call upon the
3 Honourable Robert L. Stanfield, Premier of Nova Scotia,
4 who will present a brief on behalf of the Government of
5 Nova Scotia. This brief will be Exhibit No. 1 in the
6 record of the Commission.

7 HONOURABLE MR. STANFIELD: Mr. Commissioner, it is
8 my very pleasant duty first of all to extend on behalf of
9 the Government and the people of this Province a welcome
10 to the Commission. The difficulties of the Coal Commiss-
11 ion have been giving increasing concern to the people of
12 Nova Scotia, and in particular to the coal mining area.
13 The problems involved are recognized to be difficult. The
14 appointment, therefore, of a man of such great distinction
15 to inquire into the problems of this industry has been
16 welcomed by Nova Scotians. Your reputation for industry,
17 ability and insight, together with your well known recog-
18 nition of the human factors involved in economic questions
19 made your selection for this important task a most fortun-
20 ate one.

21 The Province of Nova Scotia has prepared an extens-
22 ive submission for the consideration of the commission.
23 I propose, sir, with your consent to deal with this sub-
24 mission, and also to submit some additional remarks on
25 points that may develop. The purpose of the submission
26 was not to attempt to supply answers to all the questions.
27 Indeed, prior to the appointment of the Commission,
28 discussions have been held with ministers and officials
29 in Ottawa with a view to studies being made of some of
30 these important questions, because it was recognized that



1 neither our Government services nor, to some extent at
2 least, the Government services of Canada, have the extra
3 personnel to develop the answers to all of these questions

4 It was considered possibly the Government might
5 retain the services of experts to conduct studies.

6 Actually the Steel Study that was commissioned by this
7 Government last autumn arose out of these discussions.

8 But it was eventually agreed, I think, rather than any
9 unofficial studies of that nature, it would be more
10 satisfactory and more effective if a Royal Commission
11 were appointed, and certainly it is our hope that the
12 expert technical staff of the sort that may be required
13 would be available to the Commission.

14 Therefore the purpose of this submission is to
15 suggest and present information that will be useful, and
16 also to suggest areas of investigation and questions
17 requiring answers. We may also attempt to suggest some
18 answers ourselves insofar as we are able.

19 We set forth the position of the coal industry,
20 and the submission also gives some historical background
21 that might throw some light on the present problem.
22 Because of the concentration due to the nature of the
23 resources in the industry in certain counties, we devote
24 a good deal of attention in this submission to conditions
25 and the economy in the counties of Cumberland, Pictou,
26 Inverness and Cape Breton, as well as covering in a
27 general way the economy of Nova Scotia.

28 We do deal with the industrial structure and the
29 industrial potential of Nova Scotia in the light of
30 possible new employment opportunities. We thought it



1 would be useful to the Commission to have put on paper
2 within a reasonable compass the machinery that is avail-
3 able in this province to encourage the development of
4 new industry. We thought it would also be useful to
5 devote special attention to the electric power industry
6 and its relation to the coal industry, so there is a
7 chapter here on that relationship.

8 As I say, it is assumed that expert personnel will
9 be available to the commission, and consequently our
10 recommendations on technical matters are quite general.
11 However, it is assumed throughout this submission that
12 there would be general agreement on at least two propos-
13 itions. One is, it is essential that at least a substan-
14 tial part of our national coal requirements remain under
15 Canadian control, and it is also assumed that it is an
16 important part of National policy in this country to
17 reduce as far as possible the disparity between the economic
18 regions of Canada.

19 The purpose of this Submission is to present infor-
20 mation deemed to be useful to the Commission in the deter-
21 mination of future policy. The approach has been to
22 suggest areas for investigation and questions requiring
23 answers rather than to advance specific solutions.

24 The Submission sets forth in non-technical terms the
25 present position of the coal industry in Nova Scotia.
26 The material includes historical data on the industry and
27 its place in the economy of the Province. Because of its
28 concentration due to the nature of the resource and of the
29 industry, the four areas particularly affected, Cape Breton,
30 Inverness, Pictou and Cumberland Counties, are dealt with



1 in some detail.

2 The industrial structure and potential of the
3 Province and these counties are examined in the light of
4 possible new employment opportunities. Government
5 efforts to encourage diversification are reviewed and
6 some recommendations made concerning further inducements.
7 Special attention has been given to electric power both
8 in its relation to industrial development and as a market
9 for coal.

10 In respect to the coal industry, it is presumed
11 expert personnel will be available to your Commission to
12 investigate the technical aspects of production and the
13 complicated problem of markets in the energy field.
14 Consequently, the recommendations herein are general.

15 However it has been assumed throughout that there is
16 general acceptance of two principles; one, that it is
17 in the public interest to have at least a substantial part
18 of our national coal requirements under Canadian control;
19 and, secondly, that an important objective of national
20 policy is to minimize the disparity between the economic
21 regions of Canada.

22 The recommendations in summary are:

- 23 1. Continuation of transportation subventions;
- 24 2. Continuation and extension of capital assistance;
- 25 3. Investigation of possible methods of reducing mining
26 costs, including the feasibility of new openings;
- 27 4. Close co-operation between Dominion Coal Board and
companies in marketing;
- 28 5. Investigation of sales and distribution methods;
- 29 6. Continuing examination of potential effects of
30 St. Lawrence Seaway;



1 7. Greater research effort;

2 8. Inducements to new industries.

3 Historically, Mr. Commissioner, the history of
4 coal mining in the province goes back a long way, indeed,
5 to the early part of the eighteenth century. For the first
6 one hundred years or so, the development was rather slow
7 and even by the time of Confederation production was only
8 slightly over six hundred thousand tons a year, most of
9 which tonnage came from Cape Breton Island, and I believe
10 it was based mostly on the export trade. Between the
11 time of Confederation and the outbreak of the first world
12 war, there was a very substantial growth. Indeed, in
13 1913 production of coal in this province reached an all
14 time high of somewhat over eight million tons.

15 During the half century between Confederation and
16 the outbreak of the First World War, very substantial
17 changes had taken place in our market through important
18 new market developments. As I said, before Confederation
19 the export market was the principal market, but since
20 the end of the First World War, at least since the 1920's,
21 it has been very seldom that more than five per cent of
22 our coal output has gone to the export market. Indeed,
23 more recently it has been a much smaller percentage than
24 that.

25 As I say, development took place following Confed-
26 eration based directly in part on tariff and indirectly
27 by development of industries in other parts of Canada,
28 and also in this part of Canada, providing additional
29 markets for coal in industry. Of course, the greater
30



1 development in this part of the world in that connection came
2 with the establishment of a primary steel industry in
3 Sydney in 1901.

4 The history of coal mining in Nova Scotia dates
5 from 1720 but development was slow for over a century. At
6 Confederation total Canadian production was slightly over
7 600,000 tons per year and most of that tonnage was mined
8 on Cape Breton Island.

9 There was substantial growth between then and 1913
10 when coal production in Nova Scotia reached its all-time
11 peak of 8,135,000. In the intervening half century there
12 had been important market changes. Prior to Confederation,
13 export markets were of primary importance but since the
14 1920's exports have rarely taken more than five per cent
15 of output. National fiscal policy from 1879 had consid-
16 erable influence on Nova Scotia coal mining - directly by
17 coal tariffs and indirectly by development of industries
18 which have consumed a substantial proportion of Nova
19 Scotia production. The greatest development came with the
20 establishment of a primary steel industry at Sydney in 1901.

21 So much for the period before the First Great War.
22 Between that time and the end of the Second World War,
23 I think the summary given by the Carroll Commission is
24 very succinct.

25 The level of operations prior to 1944 can be summed
26 up thus: "Over the period from 1913 to 1938, with the
27 exception of the serious strike year of 1925 and the early
28 years of the depression, production held within the com-
29 paratively narrow range of 5,500,000 to 7,000,000 tons
30 per annum. Under the stimulus of wartime demands it rose



1 again during the early war years to 7,848,000 tons in
2 1940, falling off to approximately 5,750,000 tons in 1944."

3 In other words, the production of coal in the
4 Province was still at quite a high level at the end of
5 the Second World War.

6 Since 1944 and up to the end of 1959, the production
7 of coal in Nova Scotia fluctuated between a low of
8 4,045,237 tons in 1947 (a year with a prolonged strike)
9 and a high of 6,477,023 in 1950. The production figure
10 for 1959 is 4,391,832 tons, compared with 5,269,896 tons
11 in 1958.

12 Coal continued to be mined in the four counties of
13 Cape Breton, Cumberland, Pictou and Inverness, but the
14 mines in Cumberland and Pictou Counties showed significant
15 decreases in their proportionate contribution to the total,
16 while Cape Breton increased its share. Cape Breton County
17 production represented approximately 91% of the total
18 output of coal in Nova Scotia in 1959, over 37% of the
19 Canadian coal production for that year. Since the two
20 mine disasters in 1957 and 1958, no production is recorded
21 for Springhill, in Cumberland County.

22 In our Submission we set forth some figures on
23 page 3 showing the change in coal production in the
24 different counties for the years 1944, 1958 and 1959.
25 It should be observed for example whereas at the end of
26 the First World War Cape Breton County produced 73.7 of
27 the total production of the Province, in the year 1959
28 it produced nearly 91% of the total production of the
29 Province. Whereas Cumberland County produced over 15%
30 of the total production in 1944, by 1959 it was producing



1 only 2.1%. Whereas Pictou had been producing 9.4% of
2 the total Provincial production at the end of the war,
3 in 1959 it produced slightly over half that amount,
4 5.8%. Inverness produced 1.6% in 1944, and 1.4 per cent
5 in 1959. The fall in Inverness coal production had taken
6 place somewhat earlier.

7 It is worth pointing out, I think that the produc-
8 tion of coal in Cape Breton amounts to 37% of the total
9 coal production of Canada. I think it will be clear from
10 these figures that while coal production still is import-
11 ant locally as a source of employment in the Counties of
12 Cumberland, Pictou and Inverness, the coal problem is
13 even more significant I think, in terms of what has
14 happened in the past. In other words, in my own partic-
15 ular case, there was formerly more coal produced than
16 there is today and there has not been sufficient new
17 development opportunities, and there has not been adequate
18 steady employment to replace employment that was formerly
19 available in the counties in this province.

20 On page 3 also in the Submission we have set forth
21 some figures on the labour force in coal mining in
22 Nova Scotia for the years 1921, 1931, 1941 and 1951. It
23 can be seen that in 1921 there was just under eleven
24 thousand persons employed in coal mining in the Province,
25 and it went up to nearly sixteen thousand in 1931 and
26 stayed at approximately the same figure in 1941 and then
27 fell to just over fourteen thousand in 1951. However,
28 the current 1959 employment stands at just over eight
29 thousand persons, showing a very substantial decrease
30



in coal employment in this province in 1951.

As a percentage of the total labour force in this Province, coal mining amounted to nearly six per cent in 1921, and in 1951 it was just over six per cent. Of course, it would be substantially less than six per cent today in view of the substantial decline in coal mining employment since 1951.

Coal Production by Counties as a
Percentage of the Total for Nova Scotia
for 1944, 1958 and 1959

<u>County</u>	<u>1944</u>	<u>1958</u>	<u>1959</u>
	<u>%</u>	<u>%</u>	<u>%</u>
Cape Breton	73.7	86.1	90.6
Cumberland	15.3	7.5	2.1
Pictou	9.4	5.3	5.8
Inverness	1.6	1.0	1.4

(see also appended tables for coal production by Counties, 1944 to 1959, and percentage distribution at end of this chapter)

Employment and Productivity

Employment in Nova Scotia coal mines, as measured by the Census labour force statistics, varied over the years from 1921 to 1951 between 11,000 and 16,000 persons. (Current (1959) employment stands at approximately 8,042 persons - according to the Nova Scotia Department of Mines estimate of the labour force during December of 1959).

Coal miners in 1921 and in 1951 represented approximately 6% of the total labour force in Nova Scotia; since 1951 this proportion has fallen.



LABOUR FORCE IN COAL MINING IN NOVA SCOTIA

	<u>Census Years 1921, 1931, 1941, 1951</u>			
<u>Labour Force</u>	<u>1921</u>	<u>1931</u>	<u>1941</u>	<u>1951</u>
Coal Mining	10,961	15,965	15,455 ^x	14,145
% of total Labour Force	5.9%	8.8%	8.0%	6.4%

x Not including those in the Armed Forces.

Source: Census of Canada. 1921, 1931, 1941, 1951

On page 4 we set forth some figures and show productivity in coal mines in terms of tons per man day. It is striking that these figures, if they are correct - and I assume they are since they are provided by the Nova Scotia Department of Mines in their annual report - show very little change in terms of production per man day between 1921 and 1951. There was 1.99 tons per man day in 1921 and 2.11 tons per man day in 1951. Since 1951, there has been an increase, and the estimate for 1959 is 2.73 tons produced per man day. I understand this is largely the result of the mechanization program in the mines.

I think I should point out that I believe the figure of 2.73 tons per man day would have been higher if it had not been for the cut back in time in the mines. This has no doubt produced a discouraging effect. I think there were indications that marketing conditions were becoming acute, that production per man day was rising quite substantially, and I think it would be fair to assume that if there was a feeling of security and of expectation of steady employment, and actual steady employment in the pits, that figure of 2.73 tons per man



day would substantially increase. The submission goes on to show the distribution of Nova Scotia coal and the change in pattern of distribution from the end of the second war down to 1959.

Productivity in the coal mines over the decades has shown some improvement, as noted below, in terms of tons per man day.

Tons of Coal Produced per Man Day

Census Years 1921, 1931, 1941, 1951

Tons (2,000 lb.)

<u>1921</u>	<u>1931</u>	<u>1941</u>	<u>1951</u>
1.99	2.07	2.01	2.11

Source: Nova Scotia Department of Mines Annual Report

The latest (1959) figure is 2.73 tons produced per man day, a further improvement over 1951, and largely a result of mechanization in the mines since 1950.

Distribution

The attached schedule shows the areas into which Nova Scotia coal was shipped during the years 1944 to 1959, and reflects a changing pattern of distribution.

From 1944 to 1959 the sales of coal to the railways declined by nearly 94%, due to their dieselization program. These and other losses during this period were counterbalanced in part by growing shipments to the other provinces, largely to Quebec. Sales in Quebec have been over two million tons annually, around 45% to 50% of total shipments, and represent a restoration of the



1 market in this area to approximately pre-war levels.

2 Shipments to Ontario in the years since 1944 were
3 infrequent and of minor importance until recently. In
4 1959, by virtue of increased subventions, approximately
5 177,000 tons were disposed of in Ontario. The increases
6 in subventions, regarded as emergency measures, were
7 put into effect to meet a market crisis evident in mount-
8 ing stockpiles of coal.

9 Exports throughout most of the past 15 years
10 represented less than one per cent of total shipments.
11 The Carroll Commission also noted that from the 1920's
12 to 1944 exports had rarely taken more than five per cent
13 of output.

14 I think the table which constitutes page 5 of
15 the brief proves to be very interesting indeed. I
16 suggest this table shows that during the last ten years
17 there has been no substantial shrinkage of the market
18 for coal in this Province. In the years 1949, 1950 and
19 1951, for example, shipments within the Province were
20 just under two million tons. In 1959 they were just
21 under 1.8 hundred thousand tons. I think it is worth
22 emphasizing that while coal has lost certain customers
23 in Nova Scotia, the overall market in this Province has
24 not changed materially through the last ten years.

25 I think the table indicates, also, that during the
26 last ten years the shipments to other Provinces shown in
27 the second column have not changed materially. In 1949,
28 1950, 1951, for example, that ran around 2,800,000 tons,
29 and they ran around the same figure till 1958 - 1959.
30



1 Admittedly, subventions were increased in the meantime,
2 and admittedly some of those customers to whom coal
3 was sold in 1958 and 1959 may be marginal in the sense
4 they may be contemplating a change to other fuel; but
5 nevertheless these figures indicate that while no doubt
6 some customers will be lost and other customers will be
7 taking more, the total effect, especially to other
8 Provinces, remains substantially the same.

9 When you go over to the column "Railways", you
10 notice the big change. In 1950, for example, sales
11 to railways of Nova Scotia coal were close to 1,200,000
12 tons. Today they are virtually negligible. In fact, with
13 the announcement of the intention of the S. & L. to go
14 away from coal, I suppose the amount of coal that will
15 be sold in future to railways will be virtually zero. In
16 other words, the big change in the overall picture that
17 has taken place is the loss of the railway market and
18 I am aware of course that other customers have been lost,
19 but it is worth pointing out, I think, that if this
20 Province still had the railway market, that we would not
21 be faced with anything like the problem we are faced with
22 today. The loss of the railway market pretty well makes
23 the difference between coal sales today and coal sales
24 ten years ago.

25 Shipments to Ontario since the Second World War
26 were not very important until recently. Even in 1959
27 they were not large in terms of basic amounts, but they
28 were important when every effort was being made to sell
29 any coal that could be sold, and approximately 177,000
30



1 tons were disposed of in Ontario, and that was of very
2 material assistance to the industry and the coal miners
3 of Nova Scotia.

4 Exports have represented in the last fifteen years
5 less than 1 per cent of total production. The Carroll
6 Commission had already noted that by the end of the
7 Second World War they were not a large factor in the
8 Nova Scotia coal picture, although there had been
9 certain years in which there had been substantial sales
10 of coal in other markets in Canada.

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Distribution of Nova Scotia Coal Sold - Mine Shipments

Fiscal and Calendar Years¹ - 1944 to 1959

Date	Nova Scotia	To Other Provinces ²	To Quebec alone	Percentage Shipments to Quebec	Exports (Including St. Pierre)	Exports as Percent of Total
1944	2,427,735	1,842,142	467,126	8.79	9,159	0.17
1945	2,323,710	1,449,878	194,897	4.17	9,310	0.19
1946	2,088,011	1,788,799	603,455	12.33	12,072	0.24
1947	1,695,052	1,280,792	522,150	14.58	32,641	0.91
1948	2,163,103	2,836,468	1,703,198	27.97	89,985	1.47
1949	1,953,678	2,850,628	1,949,107	33.82	94,395	1.63
*1950	1,980,975	2,758,052	1,793,790	29.53	56,818	0.93
*1951	1,935,666	2,725,120	1,803,966	30.90	49,622	0.85
*1952	1,971,819	2,599,260	1,680,387	30.63	56,993	1.03
*1953	1,794,448	2,663,069	1,853,755	34.77	10,453	0.19
*1954	1,691,313	3,130,852	2,419,688	44.42	12,662	0.23
*1955	1,782,478	2,989,897	2,271,426	40.54	270,635	4.83
*1956	1,915,520	2,969,653	2,244,721	40.22	245,829	4.40
*1957	2,019,071	3,005,410	2,322,811	44.04	13,284	0.25
*1958	1,693,943	2,843,724	2,295,295	49.14	12,664	0.27
*1959	1,768,812	2,754,489	2,075,798	45.01	8,505	0.18

Railways	Railways as percent of Total	Bunker	Total Shipments
923,255	17.37	103,573	5,312,187
782,597	16.74	104,281	4,672,820
891,125	18.22	110,321	4,890,328
420,523	11.74	151,666	3,579,541
875,760	14.38	115,658	6,088,479
766,655	13.50	98,000	5,763,084
1,189,931	19.59	86,770	6,072,546
1,036,608	17.76	89,577	5,836,593
786,632	14.34	69,419	5,484,768
803,416	15.07	59,715	5,331,101
558,914	10.26	52,725	5,446,466
497,714	8.88	53,596	5,602,334
410,330	7.35	39,175	5,580,507
205,169	3.89	31,002	5,273,936
95,184	2.03	25,404	4,670,919
60,446	1.31	20,240	4,612,492

1. The totals prior to 1950 are for the fiscal year ended November 30; from 1950 on the totals are for the Calendar Year. (marked *) *Calendar Years.

2. Includes Quebec

Source: Nova Scotia Department of Mines Annual Reports, 1944 to 1958 inclusive.
Preliminary Statistics of the Nova Scotia Department of Mines for the year 1959.



1 Reference is made on page 6 to the question of
2 costs. We all recognize this to be a very fundamental
3 question of this whole problem.

4 The benefits from mechanization were not realized
5 as soon as had been anticipated and in the meantime other
6 cost factors have tended to obscure the financial
7 advantages of the program. Then, the 1957-58 recession
8 combined with other factors to turn the problems of the
9 Nova Scotia coal industry into a crisis. Reduced industrial
10 markets, and low cost surplus hydro power in Ontario were
11 added to the longer term decline in the railway market.
12 The combined result of these factors was short time in
13 the mines.

14 Quite apart from the serious human problems caused
15 by unemployment, layoffs add to the production cost per
16 ton. Thus the competitive position of Nova Scotia coal
17 deteriorated with a further rise in pithead costs.

18 The special assistance in addition to the ordinary
19 subvention payments implemented in April 1951 made poss-
20 ible the sale of Nova Scotia coal in Ontario. The
21 Government of Nova Scotia is participating in this supple-
22 mentary measure designed to meet the present crisis.
23 These are regarded as emergency measures and the fundam-
24 ental problem of costs in relation to competing fuels
25 remains to be solved.

26 On pages 7 and 8 of the Submission we give some
27 detailed statistics about coal production in Nova Scotia
28 and in the different counties. This is included with the
29 fact that this information will be helpful to the
30 Commissioner in getting the whole picture in the Counties.



Coal Production - Nova Scotia and Counties

Calendar Years and Fiscal Years Ending November 30th

1944 - 1959

(tons - 2,000 lbs.)

Date	Cape Breton	Cumberland	Pictou	Inverness	Total Nova Scotia
1944	4,284,799	888,377	547,084	93,604	5,815,180
1945	3,735,100	786,472	562,584	93,304	5,177,470
1946	3,880,567	813,734	580,887	92,513	5,367,701
1947	3,011,163	533,712	406,304	83,082	4,045,237
1948	4,881,653	782,633	650,092	97,735	6,412,113
1949	4,784,380	720,184	601,911	89,847	6,196,322
1950*	4,928,982	781,100	687,599	79,342	6,477,023
1951*	4,801,490	804,904	640,261	64,613	6,311,268
1952*	4,495,951	804,850	531,905	71,241	5,903,947
1953*	4,459,385	730,425	530,920	66,108	5,786,838
1954*	4,511,998	758,590	504,303	64,870	5,839,761
1955*	4,517,692	775,492	378,951	58,608	5,730,743
1956*	4,606,183	649,814	442,523	72,151	5,770,671
1957*	4,866,466	487,293	270,927	60,332	5,685,757
1958*	4,539,457	395,389	280,073	54,977	5,269,896
1959*	3,981,339	93,981	256,885	59,627	4,391,832

* Calendar Year

Source: Department of Mines Annual Reports
Preliminary Statistics of the Nova Scotia Department of
Mines for the year 1959.



On page 8 we give the percentage of coal production in the different counties in some detail, and I have already referred to this.



Coal Production - Counties as a Percentage of

Total for Nova Scotia

1944 - 1959

Date	Cape Breton	Cumberland	Pictou	Inverness
1944	73.7	15.3	9.4	1.6
1945	72.1	15.2	10.8	1.8
1946	72.3	15.2	10.8	1.7
1947	74.4	13.2	10.3	2.0
1948	76.1	12.2	10.1	1.5
1949	77.2	11.6	9.7	1.4
1950	76.1	12.0	10.6	1.2
1951	76.1	12.8	10.1	1.0
1952	76.2	13.6	9.0	1.2
1953	77.1	12.6	9.2	1.1
1954	77.3	13.0	8.6	1.1
1955	78.8	13.5	6.6	1.0
1956	79.8	11.3	7.7	1.2
1957	85.6	8.6	4.8	1.1
1958	86.1	7.5	5.3	1.0
1959	90.6	2.1	5.8	1.4

Note: the totals do not all add up to 100.0% due to rounding



1 In the next chapter of the Submission we attempt
2 to show clearly the importance of the coal industry in
3 the Province, and we go into some detail in this
4 connection. We give the figures for the total labour
5 force in the Province in 1951, and we show on the
6 accompanying tables how this employment was distributed
7 among the different industries.

8 The labour force in Nova Scotia in 1951 numbered
9 220,806 persons, or nearly 35 per cent of the total pop-
10 ulation. Of this figure 178,087 were male, and 42,719
11 female.

12 The tables following indicate the industrial
13 distribution of this labour force compared with that for
14 Canada, and the changes in the proportion of workers in the
15 different industries over the Census years 1921 to 1951.
16 Agriculture in Nova Scotia, for example, has shown a steady
17 decline in numbers employed over this period, while manuf-
18 acturing, trade and service industries have shown marked
19 increases. Coal mining up to 1951 had scarcely varied as
20 a percentage of the total labour force.

21 The distribution in Nova Scotia is characterized by
22 a concentration in the service industries of some 25%,
23 due in part to the relatively large number of defence
24 personnel in the area. Manufacturing is second in import-
25 ance, and accounts for 17% of the labour force.

26 Coal Mining, with somewhat more than 6% of the
27 labour force, ranks seventh in importance as a labour-
28 absorbing industry. It is consequently a very significant
29 sector of the Nova Scotia economy, in comparison with the
30



1 coal mining industry for Canada as a whole, which employs
2 less than one per cent of the Canadian labour force. Over
3 half of all Canadian coal miners work in Nova Scotia.

4 It should be pointed out that coal mining employment
5 represented approximately 13% of the industrial labour
6 force of Nova Scotia. The economic importance will be
7 better understood in the light of its concentration and
8 the extent of community and area dependence, to be dealt
9 with later in this submission.



INDUSTRIAL DISTRIBUTION OF THE LABOUR FORCE*

IN NOVA SCOTIA

Census years 1921; 1931; 1941; 1951

<u>Industry</u>	<u>1921</u> %	<u>1931</u> %	<u>1941</u> %	<u>1951</u> %
Agriculture	26.5	24.2	18.5	10.6
Forestry and Logging	1.3	1.4	3.4	2.7
Fishing and Trapping	6.7	6.4	5.4	4.4
Mining, Quarrying & Oil Wells	8.3	9.4	8.8	7.1
<u>Coal Mining</u>	5.9	8.8	8.0	6.4
Manufacturing	12.0	10.5	15.0	16.7
Electricity, Gas & Water		.4	.6	1.2
Construction	6.4	6.3	6.4	7.4
Transportation, Storage & Communication	7.8	8.4	7.9	8.2
Trade	8.3	8.4	10.3	13.6
Finance, Insurance & Real Estate	1.1	1.3	1.3	1.6
Service***	16.7	17.6	17.8	24.9
Not stated	4.9	5.7		1.6
Total Labour Force - (number persons)	100.0 185,556	100.0 181,087	97.8 214,651****	100.0 220,806

* Labour force figures for 1921 and 1931 include those persons gainfully occupied who were 10 years of age and over, while the 1941 and 1951 figures include those 14 years of age and over.

** Includes those on Active Service.

*** Devence Services are included in this group along with other government, community, recreation, business, professional and personal services.

**** Included in this figure are 4,757 persons who were not gainfully employed prior to enlistment, which is 2.2% of the total, and which is not recorded in the 1941 percentage column.

Source: Census of Canada 1921, 1931, 1941, 1951



Labour Force in Nova Scotia and Canada, Industrial Distribution

Census Year 1951

Industry	Nova Scotia	% of total labour force %	Canada*	% of total labour force %
<u>All Industries</u>	220,806	100.0	5,286,153	100.0
Agriculture	23,331	10.6	827,030	15.6
Forestry and Logging	5,913	2.7	129,832	2.5
Fishing and Trapping	9,769	4.4	50,579	1.0
Mining, Quarrying and Oil Wells	15,570	7.1	103,848	2.0
<u>Coal Mining</u>	14,145	6.4	24,321	0.5
Manufacturing	36,929	16.7	1,360,662	25.7
Electricity, Gas and Water	2,569	1.2	61,814	1.2
Construction	16,392	7.4	350,896	6.6
Transportation, Storage and Communication	18,169	8.2	402,707	7.6
Trade	30,069	13.6	709,768	13.4
Finance, Insurance and Real Estate	3,559	1.6	143,995	2.7
Service	54,893	24.9	1,077,465	20.4
Not Stated	3,643	1.6	67,557	1.3

* Not including Yukon and Northwest Territories

Source: Census of Canada, 1951



1 On page 11 corresponding figures for the country
2 as a whole and for Nova Scotia are given, so that an
3 easy comparison may be made between the distribution of
4 the labour force in this province and in the nation.

5 It will be seen that employment in agriculture in
6 this Province has shown a steady decline as it has in
7 the nation. Certainly it has in Nova Scotia.

8 In this Province employment in manufacturing and
9 trade and services has shown a marked increase, and up
10 to 1951 employment in coal mining has scarcely changed
11 or varied, and since 1951 the percentage has declined.
12 It will be noticed that this Province, as compared with
13 Canada as a whole, has a concentration of employment
14 in the service industries. The percentage of the labour
15 employed in the service industries in Nova Scotia is
16 approximately 25%, whereas for the country as a whole it
17 is 20.4%. The reason for this is probably due to the
18 relatively large number of service personnel in the
19 Nova Scotia area.

20 Coal Mining in 1951 was something less than 6%.
21 Today it is something less than 6% of the labour force
22 also. It ranks seventh in importance as a labour
23 absorbing industry or a source of employment. It is a
24 much more significant sector in the Nova Scotia economy
25 than coal mining is for the country as a whole.

26 It will be noted on page 11 that 0.5 per cent of
27 employment in the whole nation is derived from coal
28 mining, whereas something not too far short of six per cent
29 of the labour force in Nova Scotia is employed in coal
30



1 mining. Over half the coal miners in Canada work in
2 this province.

3 It should be pointed out, I think, sir, that while
4 coal mining now amounts to something less than six per
5 cent in the Province, it accounts for approximately
6 13% of employment of the Industrial Labour Force.

7 Furthermore, it should be emphasized that the concentration
8 of this industry in certain counties, and in particular
9 Cape Breton County, makes it an even more significant
10 factor in the Labour picture than it would be if the
11 employment were spread generally throughout the Province.

12 On page 12 of the Submission we set forth some of
13 the figures for the production of industries in this
14 Province. It will be seen for the year 1957 the net
15 value of production in our coal mines amounted to 13.2%
16 of the total, which is a very significant percentage
17 indeed.
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1 table, with the 1957 percentages also given for Canada.

2 Within the manufacturing group, primary production
3 represents for Nova Scotia a greater proportion than for
4 Canada as a whole. In comparison with the other Atlantic
5 Provinces, the reverse is true and secondary manufacture
6 is relatively more important in Nova Scotia.

7 The mining industry is of major importance in
8 relation to the other commodity-producing sectors. It
9 ranks third in net value of production, after manufactur-
10 ing and construction, and represents 13% of the provincial
11 total. The comparative figure for Canada is seven per
12 cent. Coal accounts for over three-quarters of the value
13 of mineral production in Nova Scotia.

14 On the table on page 13 there are additional
15 figures showing the percentage of net value of production
16 in different industries in this Province as compared with
17 the nation as a whole.
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three-quarters of the value of mineral production in this Province is accounted for by coal.

Analysis of the commodity-producing industries shows that manufacturing is the most important industry in Nova Scotia in terms of production. The value and relative position of this and the other major industries is shown in the net value of production figures for 1957 which follow:

	\$'000	%
Agriculture	24,048	6.1
Forestry	14,610	3.7
Fisheries	23,084	5.8
Trapping	176	0.0
Mining	52,233	13.2
Electric Power	17,945	4.5
Manufactures	175,683	44.4
Construction	88,298	22.3
Grand Total	396,077	100.0

Source: Survey of Production 1953-1957, Dominion Bureau of Statistics

It should be noted that the above figures cover only commodity producing industries and do not include transportation, communications, trade, finance and service activities.

The primary industries of mining, fisheries and forestry are relatively more important in Nova Scotia than for Canada as a whole, but their place in the economy has diminished over the past thirty years with the more rapid growth in manufacturing. The comparative position in 1936, 1946, 1956 and 1957 is shown in the accompanying



1 table, with the 1957 percentages also given for Canada.

2 Within the manufacturing group, primary production
3 represents for Nova Scotia a greater proportion than for
4 Canada as a whole. In comparison with the other Atlantic
5 Provinces, the reverse is true and secondary manufacture
6 is relatively more important in Nova Scotia.

7 The mining industry is of major importance in
8 relation to the other commodity-producing sectors. It
9 ranks third in net value of production, after manufactur-
10 ing and construction, and represents 13% of the provincial
11 total. The comparative figure for Canada is seven per
12 cent. Coal accounts for over three-quarters of the value
13 of mineral production in Nova Scotia.

14 On the table on page 13 there are additional
15 figures showing the percentage of net value of production
16 in different industries in this Province as compared with
17 the nation as a whole.



Percentage Analysis of Net Value of Production, Nova Scotia
(with comparative Canadian percentages for 1957)

	1936	1946	1956	1957	Canada 1957
	%	%	%	%	%
Agriculture	17.3	14.1	6.7	6.1	8.9
Forestry	2.6	5.4	4.2	3.7	3.7
Fisheries	5.7	10.3	6.6	5.8	0.5
Trapping	0.4	0.4	0.0	0.0	0.1
Mining	19.5	12.9	13.2	13.2	7.3
Electric Power	4.5	3.5	4.7	4.5	3.6
Manufactures	29.1	36.0	42.1	44.4	55.1
Construction	20.9	17.4	22.5	22.3	20.8
Total	100.0	100.0	100.0	100.0	100.0

Source: D.B S Survey of Production. 1926-1956; 1953-1957



To continue further with the general picture of the economy of this Province, on page 14 of the Submission there is some discussion of the Nova Scotia rate of growth and I think these are very interesting figures. They show that in terms of constant dollars the gross Provincial Product for Nova Scotia in 1946 was just about 60% higher than in 1939 and during the same period the change in the National Product in terms of constant dollars was approximately the same. In other words, the increase in gross products in this Province during the war years was about the same as the National average.

However, between 1956 and 1957 the gross National Product for the country as a whole increased to a point where it was nearly 150% above 1939 in terms of constant dollars, whereas the figure for Nova Scotia was 83.1% increase over 1939 in terms of constant dollars.

When one compares the increase in Nova Scotia in 1957 as compared with 1946, one finds that the increase was only 15%. In other words, while there was a big jump in the National Product, in the Provincial Product during the war years, in the years since the war the gross Provincial Product increased by only a further 15%; whereas, during the same period the National Gross, National Product increased by 56%.

In the absence of figures published by the Dominion Bureau of Statistics that measure the value of all goods and services for Nova Scotia corresponding to gross national product, estimates have been made. The limitations of these figures are recognized but they are



presented as an indication of the comparative rates of growth for the province and the nation as a whole.

In the following table the figures for selected years are set out in both current and constant dollars.

Gross Provincial Product for Nova Scotia &
Gross National Product for Canada in current and
constant (1949) dollars for Selected years 1939,
1946, 1957. (Million Dollars)

Year	Gross Prov. Prod. Nova Scotia		%change Constant cf. 1939	Gross Nat'l Prod. Canada ^x		%Change Constant cf. 1939
	Current	Constant		Current	Constant	
1939	220	372		5,636	9,536	
1946	461	593	+ 59.4	11,850	15,251	+ 59.9%
1957	911	681	+ 83.1	31,773	23,747	+149.0%

^x D.B.S. National Accounts

Note: The conversion from current to constant dollars was obtained by using the "Implicit Price Index" given in the National Accounts for the appropriate year.

From 1939 to 1957, in current dollars, the Gross Provincial Product (our estimate) increased by 314% and, the Gross National Product by 463%. A more accurate indication of real growth is shown in the change in the gross product in constant dollars, which amounted to 83% for Nova Scotia compared to 149% for Canada.

Comparing the rates of growth in the intervening years, it can be seen that during the war years 1939 to 1946 they were similar, approximately 60%. However, the rate of post-war expansion which the Canadian economy has enjoyed since 1946 was not matched in Nova Scotia.



1 From 1946 to 1957, the gross provincial product increased
2 by only 15% in contrast to a jump of 56% for the gross
3 national product.

4 Now we go on to indicate the areas of growth, or
5 at least we do not dwell on this. This shows that it
6 becomes clear that the greater part of the expansion in
7 this Province in gross products since the war has been
8 as a result of increase in manufacturing and construction
9 which increased by more than 100%. The value of
10 production in forestry and fisheries also increased very
11 substantially. Mining, while it retained its rank as
12 the third most important sector in the economy showed
13 almost no change over that period. I think that is
14 significant.

15 Comparison of the provincial economy in 1939 and
16 in 1957 indicates the areas of growth over the intervening
17 years.

18 Considering only changes in real value, it becomes
19 evident that the greater part of the expansion was due
20 to the increases in manufacturing and construction which
21 increased more than 100%. The value of primary production
22 in forestry and fisheries almost doubled. Mining, though
23 still retaining its relative position as the third most
24 important sector in the economy, showed almost no change
25 over the period.

26 Sir we go on now, having covered in a general way,
27 and supplied, I hope, some statistics that might be useful
28 relating to the economy as Nova Scotia as a whole and
29 covering its development since the war, we go on to
30



1 concentrating some attention on the economics of the
2 coal mining counties because we believe that the economics
3 of these counties are of particular importance to an
4 inquiry such as this. We thought that one of the ways
5 in which we could perhaps be most useful would be to
6 provide this inquiry with a good deal of detailed infor-
7 mation about these counties.

8 The Submission shows the growth in the population
9 of Cape Breton County and would show up until about 1941
10 the population of Cape Breton County grew at a rate in
11 excess of the rate of the Province as a whole but that
12 since 1941 the growth of the population in that county
13 has been somewhat less than in the Province as a whole.
14 Indeed, from 1951 to 1956 it was to the extent of 4.3%
15 as compared with 8.1% increase in the Province.

16 There were in Cape Breton in 1956 125,000 people
17 and the working age group is somewhat smaller in terms
18 of proportions in the County than for either Nova Scotia
19 or for Canada. The labour force in Cape Breton in 1951
20 as a percentage of the total population of the County was
21 just about 31%, whereas the corresponding percentage for
22 the Province is 34.5% and for the National, 37.7%.

23 The population of Cape Breton County has grown
24 steadily since 1871, and until 1941 at a pace generally
25 in excess of that for the Province as a whole. Since
26 1941 growth has been proportionately less than for Nova
27 Scotia, and from 1951 to 1956 the increase was in the
28 order of 4.3% which compares with an increase of 8.1%
29 for the Province. In 1956 the population was 125,478,
30 of which 55.6% fall in the age group from 15 to 65 years



1 years of age. This working age group is proportionately
2 smaller for the County than for Nova Scotia or Canada,
3 where the percentages are 57.6% and 59.8% respectively.

4 In 1951 the total labour force of Cape Breton County
5 was 37,056, of which women accounted for 17.3%. This
6 percentage was lower than for Nova Scotia (19.3%) or Can-
7 ada (22.1%). The labour force as a percentage of total
8 population was 30.8% in Cape Breton County, 34.4% in
9 Nova Scotia and 37.7% in Canada.

10 Table 1 gives the labour force distribution by
11 industrial group for 1951. Compared with Nova Scotia
12 generally, a much larger percentage of the labour force
13 of Cape Breton County is engaged in mining, a larger
14 percentage in manufacturing and relatively fewer in other
15 primary and service groups.

16 The county has a supply of power adequate for
17 current needs being generated by Seaboard Power Corpor-
18 ation Ltd., a subsidiary of Dosco, which has thermal
19 generating plants at Glace Bay and Sydney. Seaboard sells
20 to the various distributing agencies of the different
21 towns within the county, and provides most of the power
22 used on Cape Breton Island. Cape Breton is now connected
23 also with the provincial power grid.

24 Regarding transportation, the county is well served
25 by highways, railways, airports and harbours. Sydney is
26 the highway hub of the county, and is also the centre of
27 a bus transportation system to the surrounding towns and
28 localities. The county is served by the Canadian National
29 Railways, which also provides ferry service to Newfoundland,
30 and by the Sydney and Louisbourg rail line which is owned



by Dosco. There is an airport at Reserve between Sydney and Glace Bay which provides flights daily, connecting with all parts of the world. There are several good harbours within the county, with piers at Sydney, North Sydney, Louisbourg, Little Bras D'or, and Glace Bay.

1. All statistics on population used throughout this chapter are based on the 1951 Census of Canada, and the 1956 Interim Census, unless otherwise noted.

2. All statistics on labour force are based on the 1951 Census of Canada, unless otherwise noted.

The table on page 17 shows the distribution of industrial employment in 1951 in Cape Breton County and in the province generally, and it shows that a much larger percentage of the labour force in Cape Breton is engaged in mining and in manufacturing, and a relatively smaller percent in other primary and service groups. For example, in manufacturing in 1951 over 23 per cent of the male population in Cape Breton was employed in manufacturing, as against 18.5% for the Province, but the most significant figure is that over 1/3 of the total male labour force in Cape Breton was employed in Mine Quarry as against less than 10% in the Province as a whole, 8.8%. More than 1/3 of the total labour force in Cape Breton County in 1951 was employed in Mining and Quarries. This shows very clearly the dependence of the County on coal mining.

Now the County is supplied with electric power by the Seaboard Power Corporation, at Dosco, which has thermal generating plants at Glace Bay and Sydney.



1 In all respects I think it can be said that the supply
2 of power is adequate for current needs and I assume it
3 will be expanded very rapidly to meet new developments.

4 The County is well served with various means of
5 transportation, highways, railways, airports and harbors.
6 Similarly with, not singling out one hotel but I am sure
7 the Commissioner will be very well treated while he is
8 in Cape Breton and will experience the well known Cape
9 Breton hospitality.

10 Sydney is the highway hub of the County and it is
11 the commercial and general centre of the County. There
12 is an airport at Reserve between Sydney and Glace Bay and
13 there are several airports in the County. From the point
14 of view of transportation and accommodation, the County
15 is attractive for further development.



Table 1

Labour Force by Industrial Group, 1951

Industrial Group

All Industries	No.	30,639	6,417	178,087	42,719
Agriculture	No.	1,055	35	22,787	544
	%	3.6	.6	13.0	1.3
Forestry & Logging	No.	151	3	5,822	91
	\$.5	.04	3.3	.2
Fishing & Trapping	No.	544	1	9,736	33
	%	1.8	.01	5.6	.1
Mining & Quarrying	No.	10,214	70	15,465	105
	%	34.5	1.1	8.8	.3
Manufacturing	No.	6,875	319	32,465	4,464
	%	23.2	5.1	18.5	10.6
Electricity, Gas & Water	No.	377	23	2,390	179
	%	1.3	.4	1.4	.4
Construction	No.	1,666	19	16,217	175
	%	5.6	.3	9.3	.4
Transportation & Communication	No.	2,688	202	16,515	1,654
	%	9.1	3.2	9.4	3.9
Trade	No.	3,257	1,738	20,948	9,121
	%	11.0	27.9	12.0	21.6
Finance	No.	285	197	2,047	1,512
	%	1.0	3.2	1.2	3.6
Service		2,487	3,628	30,617	24,276
		8.4	58.2	17.5	57.6

Source: Census of Canada, 1951



1 The County accounted roughly for 18% of the
2 population of the Province and about 19% of the retail
3 sales - approximately what one would expect.

4 Cape Breton has about 76% of the population of
5 the Island. Other than coal, the natural resources in
6 Cape Breton County that are being developed would be in
7 the field of agriculture, forestry, and in fisheries.
8 There were in 1957 something over one thousand farm
9 operators but I suppose that we suggest that probably
10 less than half of these could be classified as commercial
11 farmers working on a full time basis. As far as farming
12 is concerned, dairy farming seems to be the major source
13 of income, followed by poultry and vegetables and we
14 believe that there are possibilities of expansion in
15 agricultural products but we do not believe that it would
16 be in the near future, at least to any substantial
17 increase in agriculture employment in Cape Breton County.
18 The census of 1956 shows that during the previous five
19 years employment of agriculture in Cape Breton County
20 has fallen slightly so agriculture does not offer
21 much hope in the future, at least of a substantial increase
22 in employment in Cape Breton County.

23 We give some figures for forest production of the
24 County and there again while we believe that forestry
25 will develop, while as we state there will be some increase
26 in employment in forestry in Cape Breton resulting from
27 the new chemical pulp mill in the Canso area, nevertheless
28 we feel that the increase in employment will not be large
29 in terms of the overall problem.

30 Retail sales for the county in 1951 were \$75,110,200,



which was 19% of the total for Nova Scotia, and 85% of the total for Cape Breton Island. The County had, for the same year, 76% of the population of the Island.

Natural resources, other than coal which is the most important, are being developed in agriculture, forestry and fisheries.

The total farm population of the County was 4,706 in 1956. Of the 1,013 farm operators, probably less than half can be classified as commercial farmers working on a full time basis. Dairy farming is a major source of income, followed by poultry and vegetables, in that order. There are believed to be possibilities of expansion in agricultural production but a substantial increase in employment is not likely. Indeed from 1951 to 1956 statistics indicate that employment in agriculture fell slightly in Cape Breton County.

Forest production for 1957 is given in Table II.

Table II

Forest Production in Cape Breton County 1957.

Sawn timber - Softwood	5,870,000 M.B.F.
Hardwood	150,000 M.B.F.
Pulpwood	3,340 cords
Pit Props	21,278 cords
Piling	34,900 Lin.Ft.
Railway ties	2,000 pieces

Source: Report of the Department of Lands and Forests 1958

The future of pit prop production depends on the future of coal mining, but with the establishment of the new pulp mill in the Canso area pulpwood production should



1 increase substantially and the other forest activities
2 are expected to increase moderately.

3 Fish processing is an important industry in Cape
4 Breton County and offers a distinct possibility of develop-
5 ment. We give some figures on page 19 about the value of
6 production. In 1958 it was some two and three quarter
7 million dollars as compared with one million three quarters
8 in 1952.

9 We give some figures on employment in the fishing
10 industry and we indicate our belief that moderate growth
11 at least will continue. Nothing in the recent past would
12 indicate that the growth in volume of fisheries, growth
13 in volume of fish landed or growth in fish processed will
14 lead to any substantial increase in employment because
15 you get improvement in techniques and that sort of thing.

16 In 1951 there were 154 employed in forestry and
17 logging activities and since then there has probably not
18 been much change. In 1957 there were 170 working in
19 sawmills and planing mills.¹

20 In 1958 the total quantity of fish landed in Cape
21 Breton County was 53,358,900 lbs., with a value of
22 \$2,742,066.00 compared with 34,432,000 lbs., and landed
23 value of \$1,700,600.00 in 1952.

24 In 1952 there were 853 fishermen. In 1957 there were
25 1,066 fishermen and another 514 engaged in fish process-
26 ing. (in both cases this is seasonal employment being
27 chiefly between April 15 and December 15.) It is expected
28 that this moderate growth will continue in the future.²

29 Table III gives an indication of the significance
30



of manufacturing to the economy of Cape Breton County. In 1957 manufacturing employed 6,681 persons (includes those employed in fish processing, sawmills and planing mills noted before) and the selling value of the factory shipments was \$87,402,000. From the table it is most important to note that nearly 85% of the selling value of factory shipments is listed under "other industries" which includes the large Dosco iron and steel operations in Sydney. Also over 90% of the selling value of factory shipments is concentrated in the City of Sydney, and again the important factor is the steel plant. The future of manufacturing in the County is greatly dependent on the future of the Dosco operations, directly or indirectly. Should these operations expand, local secondary and service industries will also have an opportunity to grow.

1. All statistics on manufacturing used throughout this chapter are based on the Dominion Bureau of Statistics report The Manufacturing Industries of Canada, Geographical Distribution, 1957, unless otherwise noted.

2. The statistics on fishing, except processing, throughout this chapter are based on Dominion Bureau of Statistics Monthly Fishing Reports, unless otherwise noted.

In table III on page 20 we set forth the significance of manufacturing in the economy of Cape Breton. In 1957 there were nearly 6,700,000 employed in manufacturing, but significantly though over 90% of the selling value of factory shipments is concentrated in the city



1 of Sydney so that manufacturing is largely accounted for
2 by the steel and associated industries.

3 It is very clear from these figures, I think, the
4 future of the County, the future of development in the
5 County, employment-wise is dependent on the future of
6 Dosco operations directly and indirectly both from the
7 coal industry and in the steel industry. If the steel
8 industry should expand, then presumably local, secondary
9 and service industries would also have an opportunity to
10 grow.

Table 111

Principal Statistics on Manufacturing in Cape Breton County, 1957

Industry	Number of Establishments	Supervisory and Office Employees	Production Workers	Cost at Plant of Materials Used (\$'000)	Selling Value of Factory Shipments (\$'000)
CAPE BRETON COUNTY					
Bakeries	16	44	258	1,408	2,681
Fish Processing	11	38	476	3,216	5,001
Machine Shops	3	20	36	85	381
Milk Pasteurizing Plants	7	33	128	1,760	2,697
Printing and Bookbinding	9	13	32	43	178
Sash Door Planing Mills	3	22	86	635	1,082
Sausage Casings	4	8	14	312	411
Sawmills	31	33	29	151	320
Soft Drink Manufacture	6	19	33	281	893
Other Industries	29	694	4,665	45,035	73,758
Total	119	924	5,757	52,926	87,402
SYDNEY	46	787	4,933	48,251	79,079
GLACE BAY	16	32	159	700	1,353
LOUISBOURG	4	20	252	1,596	2,726
NORTH SYDNEY	14	38	267	1,496	2,514
OTHER URBAN	5	6	28	303	461
RURAL	34	41	118	580	1,269

Source: The Manufacturing Industries of Canada, Geographical Distribution, 1957.



Now we go on to give some details, in case the Commission should wish it, about the production, the coal production in the various mines, on page 21 of the Submission. Again, it is very clear the Dominion Coal Company Limited and the Old Sydney Collieries Ltd., which are both subsidiaries of Dosco, have accounted for all but a small portion of coal production from Cape Breton County.

In 1958 Cape Breton County had 16 mines, operated by 8 companies, actively engaged in producing coal, and together they had a production of 4,539,457 tons which was approximately 86% of the total production for the Province. Production for the first eleven months of 1959 was 3,558,701 tons, down 14% from the 4,129,124 tons for the first eleven months of 1958. Coal production by Company is given in the Table IV

TABLE IV

Coal Production by Company in Cape Breton County

Company	Total 1958	Total first eleven mos. 1958	1959
Atlantic Coal Co. Ltd.,	14,231	13,200	3,683
Beaver Coal Co. Ltd.,	18,867	16,767	24,438
Bras d'Or Coal Co. Ltd.,	1,206	1,206	78,057
Crystal Coal Co., Ltd.,	4,340	x	x
Dominion Coal Co. Ltd. ^{xx}	3,621,503	3,300,704	2,806,255
Four Star Collieries Ltd.	94,791	87,289	xxx
Indian Cove Coal Co. Ltd.,	39,573	34,862	42,078
Old Sydney Collieries Ltd.	744,946	675,096	604,190
Totals	4,539,457	4,129,124	3,558,701

x Salvage operation, not available by month.

xx Dominion No. 25 closed in August 1959

xxx Taken over by Bras d'Or Coal Co. Ltd., in December/58
Source: Department of Mines Nova Scotia.



1 Current production is considerably below the war-
2 time high of 5,875,038 tons in 1940. Since 1940 it
3 fluctuated considerably, reaching a high point in 1950
4 and a low in 1947, but with a tendency to decline over the
5 period.

6 Page 22 we give some figures on production and the
7 size of the labour force employed in coal mining for the
8 various years. Significantly, I think the labour force
9 in Cape Breton employed in the coal mine has dropped
10 from about 9500 in 1946 to less than 7000 in 1959.

11 THE CHAIRMAN: That is confined to mines, is it?

12 THE PREMIER: That is confined to mines sir.

13 THE CHAIRMAN: It shows the drop of employment in
14 Cape Breton County?

15 THE PREMIER: That is not made very clear but the
16 accompanying text, I think, makes it clear. The total
17 employment in Cape Breton by all coal companies, consid-
18 ering the last month of operation for 1958 was 7,369,
19 approximately 80% of the Provincial total. Those figures
20 relate to employment in the coal mine, coal industry.

21 It is submitted this drop in employment is sub-
22 stantially due to the closing of mines. I would not
23 attempt to say how much is due to it and how much is due
24 to technological changes resulting from mechanization,
25 and so on, but clearly there has been a substantial
26 drop in coal employment already, and we attempted in the
27 submission to indicate the significance of this by
28 showing clearly how few other opportunities for employment
29 there are in Cape Breton County, and that is the real
30



1 purpose in setting forth all this detail.

2 Worth mentioning in passing, I think, is that
3 nearly all of the coal leaving Nova Scotia for other
4 markets comes from Cape Breton County, 97% of it.

5 Table V
6 Production and Employment in Cape Breton County for Selected years

	<u>Production</u>	<u>Labour Force</u> Last Mo. of Oper.
7 1940 (war-time high)	5,875,038	
8 1946	3,880,567	9,409
9 1947 (post-war low; strike)	3,011,163	8,545
10 1950 (post-war high)	4,928,982	8,790
11 1951 (census year)	4,801,490	8,622
12 1953	4,459,385	7,908
13 1957	4,866,466	7,397
14 1958	4,539,457	7,369
15 1959 (eleven months)	3,558,701	6,955

16 Source: Department of Mines, Annual Reports

17
18 Total employment in Cape Breton County for all coal
19 companies, considering the last month of operation for
20 each in 1958 was 7,369, approximately 80% of the
21 Provincial total. Considering the last month of oper-
22 ation for each up to the end of November in 1959, total
23 employment was 6,955, down 5.7% from the similar compil-
24 ation for 1958. Employment by company is given in Table
25 VI.

26 Total employed in the mines of the county has
27 declined steadily since 1946, as indicated by Table V.
28 The number fell from 9,409 in 1946 to 7,369 in 1958 and
29 6,955 for November of 1959. The closing of mines is a
30 chief factor in the drop in employment; from 1946 to 1959



1 there were eleven mines closed within Cape Breton County.
2 Another factor contributing to the drop in employment is
3 the increased mechanization of the mines with the result-
4 ing increase in production per man-day.

5 Coal from the mines of Cape Breton County, in 1958,
6 was distributed as indicated by Table VII. The largest
7 single market was Quebec, 56% of total shipments, follow-
8 ed by local shipments to Nova Scotia, 32%.

9 We show on page 23 and page 25 the problem -- no
10 problem as far as reserves are concerned -- while it may
11 be that some of the most accessible coal has been mined,
12 I think it is generally agreed that there are vast reserves
13 in Cape Breton County, and the reserves as such do not
14 constitute any problem. The Submission goes on to give
15 some detail about the various cities and towns. The
16 purpose of this detail is to show, first of all, how
17 dependent the City of Sydney is upon Steel operations.

18 There are no coal mines in Sydney and very few in
19 Sydney are classified as coal miners. Sydney is the
20 commercial centre of the Island but it is also exceedingly
21 dependent upon the steel mills, which are very basic to
22 the economy of the City.
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Table VI

Coal Labour Force by Company in Cape Breton County

Company	Last Month of operation 1958	Last Mo. of Oper. in first 11 Mos. 1958	1959
Atlantic Coal Co. Ltd.,	24	26	2
Beaver Coal Co. Ltd.,	28	27	40
Bras d'Or Coal Co. Ltd.,	31	31	87
Crystal Coal Co. Ltd.,	4	x	x
Dominion Coal Co. Ltd.,	5,816	5,734	5,426
Four Star Collieries Ltd.,	88	89	xx
Indian Cove Coal Co. Ltd.,	83	83	97
Old Sydney Collieries Ltd.	1,295	1,341	1,303
Totals	7,369	7,331	6,955

x As in Table IV

xx As in Table IV

Source: Department of Mines, Nova Scotia.

and lesser amounts to New Brunswick, Newfoundland and the railways.

For the first eleven months of 1959 the pattern of sales was similar to 1958 but shipments to Quebec and the railways were down, while shipments to New Brunswick were up.

In 1958 approximately 97% of all coal from Nova Scotia going to Quebec and Ontario originated in Cape Breton County mines. The quality of the coal and access to the market by water shipment are advantages in reaching this market.

Although the Cape Breton County field has been extensively mined during the past 135 years its remaining resources are very considerable. The coal field extends north-westerly from Cape Morien to Cape Dauphin, a distance



1 of about 36 miles. It penetrates inland from the shore
2 to a maximum distance of 8 miles and covers a land area
3 of about 200 square miles. Much of the most readily
4 available and best quality coal of the land areas has
5 been mined. The extent of the seaward area is unknown,
6 but indications are the deposit persists beyond the limits
7 of practical mining operations. In contrast to other
8 coal fields in the Province, the Cape Breton County coal
9 field has suffered little disturbance. Folds are gentle
10 and faults rare. All the coal mines in the field is high
11 volatile "A" bituminous coal, but there is a considerable
12 variation in the quality of its coal resources from the
13 various seams and for the various areas.
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Table VII
Distribution of Coal Shipped from Cape Breton County Mines

Company:	Atlantic	Beaver	Bras d'Or	Crystal	Dominion	Four Star	Indian	Cove	Old	Sydney	Total
To:											
Nova Scotia	14,231	17,919	286	840	1,065,192	33,306	30,154	107,583		1,269,511	
New Brunswick	-	-	41	-	118,443	2,410	3,433	44,578		168,905	
Newfoundland	-	-	206	-	74,007	-	2,366	79,607		156,186	
Prince Edward I.	-	-	676	-	2,613	1,624	1,137	9,237		15,287	
Quebec	-	-	-	-	1,831,841	57,086	1,998	338,006		2,228,931	
St. Pierre	-	-	-	-	4,266	-	-	8,398		12,664	
Ontario	-	-	-	-	15,328	670	-	31,795		47,793	
Railways	-	-	-	-	68,296	-	-	70		68,366	
Bunker	-	-	-	-	22,758	-	-	509		23,267	
Total Shipments	14,231	17,919	1,209	840	3,202,744	95,096	39,088	619,783		3,990,910	

Source: Department of Mines, Annual Report, 1958



1 There are different estimates of reserves but
2 for the purpose in hand that put forth by the Royal
3 Commission on Coal, 1946 will be set out briefly. This
4 estimate gave overall figures of 1,764,184,000 short tons
5 of probable mineable coal and a further 915,152,000 tons
6 of possible coal. These figures are divided in half for
7 an estimate of recoverable coal.

8 For the above Commission the Dominion Steel and
9 Coal Corporation Limited made some estimates. The company
10 foresaw some 80 years of operation on developed resources
11 alone, and a further 100 years of operation being suggest-
12 ed in the estimate of other coal resources.

13 There was common consent by all sources that the
14 life of the field will not be determined by lack of coal,
15 but by economic factors of cost, quality, and mining
16 methods.

17 The population of Sydney was 32,162 in 1956, an
18 increase of 2.6% over the 1951 population. In 1951 the
19 labour force was 11,105, which was 35% of the total
20 population. Of the total labour force 4,748, or 43%
21 were employed in manufacturing; and of these 4,074, or
22 86% were engaged in the manufacture of iron and steel
23 products. Since 1951 there has been no sustained
24 increase in employment in the steel mills which
25 are thus seen to be basic to the economy of the city.
26 There are also some secondary industries.

27 The value of retail sales in current dollars more
28 than doubled from 1941 to 1951, being \$34,023,000 in
29 1951. Sydney is the commercial centre of the county,
30



1 indicated by the fact that in 1951 it has 45% of the
2 County's retail sales and 26% of the County's population.

3 There are no coal mines within the city itself,
4 and in the census of 1951 only 175 were classified as
5 coal miners - just 1.6% of the total labour force.
6 However, the production of coal in the nearby district
7 is important to the economy of the city in that coal is
8 used in the processing of the steel and as a source of
9 electric power.

10 When one comes to Glace Bay one sees that there
11 has been a decline of nearly 5% - there was a decline
12 of nearly 5% of the population between 1951 and 1956.
13 The total labour force, however, which was very few,
14 only 5% of the labour force of Glace Bay could be said
15 to be employed in manufacturing industries. You have
16 a town of 25,000 people and you have two relatively
17 small fish processing plants and virtually everybody
18 else is dependent on coal mining, unless they have jobs
19 in Sydney or some other part of the Island.

20 Production of the three mines which are now oper-
21 ated in Glace Bay show just over two million tons in
22 1958, 45% of the County's total. The tonnage has been
23 relatively stable, at least was relatively stable over
24 recent years but while the tide has been stable, the
25 employment in the coal mines has been reduced very
26 substantially.

27 New Waterford, on the other hand, again virtually
28 completely a town of over ten thousand souls in 1956,
29 population down very slightly in 1951 as far as you can
30



1 judge from statistics, and a visit to the town would
2 confirm this, sir, a small percent of the labour force,
3 an almost insignificant proportion of the labour force
4 is engaged in any other industry, any industry other
5 than coal mining.

6 The census figures show that there are two thousand
7 residents in this town in coal mining - nearly two-
8 thirds of the total labour force, and we point out that
9 figure is less than the total employment in the mines in
10 New Waterford because quite a number of men come in from
11 outside to work in those mines, so that any effect on
12 employment in the mines in New Waterford is not only
13 disastrous for the town of New Waterford but also affects
14 the surrounding areas.

15 There is some increase in production in the mines
16 at New Waterford after 1946, and down to 1959. Employment
17 in the Coal mines in New Waterford was apparently relat-
18 ively stable. Evidently it held up better than it had in
19 Glace Bay.

20 Dominion is a town of nearly three thousand persons
21 lying between New Waterford and Glace Bay, has not got
22 a coal mine any longer since this mine was closed, but
23 the economy of Dominion is very dependent upon coal
24 mining employment. Only 24, or 3% of the labour force
25 was employed in manufacturing or mechanical operations.

26 The population of Glace Bay was 24,416 in 1956,
27 down 4.8% from 1951. In 1951 the total labour force was
28 7,639 which was 30% of the population. Only 373, or 5%
29 of the labour force, were employed in manufacturing
30



1 industries, and most of these were engaged in the
2 production of iron and steel, and food products, in that
3 order. There are two small fish processing plants in
4 Glace Bay, one of which has plans to increase plant
5 capacity.

6 In 1951 nearly 50% of the labour force of Glace
7 Bay was employed in mines. Since then employment in
8 the local mines has declined by approximately one-third,
9 and the population has declined by about 5% from 1951 to
10 1956.

11 Production in the three mines which are operated by
12 the Dominion Coal Company Limited was 2,052,009 tons in
13 1958, 45% of the county total. The tonnage has been
14 relatively stable in this area in spite of the closure
15 of mines and the substantial drop in employment. In the
16 neighbouring community of Broughton there was an increase
17 in both employment and production prior to 1959 but the
18 numbers involved are not significant in the whole picture.

19 The population of New Waterford was 10,381 in 1956,
20 down very slightly from the 10,423 in 1951. In 1951 the
21 total labour force was 3,129, making up 30% of the pop-
22 ulation. Only 84, or less than 3% of the labour force
23 were employed in manufacturing industries, and of these
24 the largest proportion were engaged in producing iron and
25 steel products, transportation equipment and foods and
26 beverages, in that order.

27 The census figures show employment of 2,010 residents
28 of the town in coal mining, being nearly two-thirds of the
29 labour force. The figure is less than total employment
30



1 reported for the mines in the New Waterford area indica-
2 ting that some of these employees are residents of
3 communities nearby. Production at these mines has
4 increased since 1946 and employment was relatively stable
5 until 1959. In 1958, the tonnage was 1,569,494, represent-
6 ing 29% of the total for the County.

7 The population of Dominion was 2,964 in 1956, down
8 slightly from 3,143 in 1951. In 1951 the total labour
9 force was 865, making up 27.5% of the population. Only
10 24, or 3% of the labour force, were employed in manufact-
11 uring and mechanical occupations.¹

12 There are no coal mines within the town itself,
13 but in the 1951 census there were 493 listed under primary
14 occupations, other than agriculture, which group would be
15 made up almost entirely of coal miners. The proportion
16 of the labour force employed in the coal mining occupations
17 shows the dependence of the town on this single industry.

18 1. For towns with a population less than 10,000, the
19 number employed in manufacturing and mechanical
20 occupations is given, but not the total employed in
21 manufacturing industry.

22 Sydney Mines, on the north side of the harbour,
23 as you well know, sir, has a population of nearly nine
24 thousand in 1956, then the population increased a little
25 bit during the previous five years. In Sydney Mines
26 only nine per cent of the labour force was employed in
27 manufacturing, mechanical operations over coal mining,
28 and that included several wood working plants. At
29 Alder Point which is outside Sydney Mines, there are two
30



1 fish processing plants, which are small at the present
2 but I understand have favourable possibilities for
3 expansion.

4 Certainly on the basis of the 1951 census figures
5 a large proportion of the labour force is employed in
6 coal mining, and outside Sydney Mines at Florence, a
7 small community with a mine where 600 men have been
8 employed there has been some reduction in employment
9 since 1946 but production has actually increased in
10 that region - the Sydney Mines region - until 1953 and
11 has held to about 800,000 tons a year until last year.
12 All these towns in the surrounding areas that I have
13 mentioned, except Sydney, are virtually completely
14 dependent on the coal mining industry.

15 North Sydney, with a population of about the size
16 of Sydney Mines, is not so dependent upon coal mines. It
17 would be affected directly only in terms of some coal
18 shipments and the economy of North Sydney is much more
19 diversified than the economy of these other towns.

20 It is an important shipping centre to ports in
21 Newfoundland. It has a ship repair and ship building
22 industry. It has a new manufacturing and supply company,
23 and it is therefore in a more diversified position than
24 any of these other towns I have mentioned.

25 The population of Sydney Mines was 8,731 in 1946,
26 up 3.8% from 1951. The labour force in 1951 was 2,434,
27 which is 29% of the total population. There were only
28 214, or 9% of the labour force, employed in manufacturing
29 and mechanical occupations, which included several wood-
30 working plants. At Alder Point, beyond Sydney Mines, are



1 two fish processing plants, which are small at present
2 but there are favourable possibilities for expansion.

3 On the basis of 1951 census figures a large prop-
4 ortion of the labour force of the town was employed in
5 coal mining. Two companies operate four mines in the
6 Sydney Mines area which includes the Florence mine where
7 over 600 have been employed. There has been some reduc-
8 tion in employment since 1946 but production increased
9 until 1953 and held at about 800,000 tons until last year.
10 The tonnage for 1958 was 784,519, 17% of the county total.

11 In nearby Bras d'Or, coal mining ceased in 1959;
12 reduction of the various operations of Bras d'Or Coal Co.,
13 Ltd., in this area has been taking place since the war.

14 The population of North Sydney was 8,125 in 1956, an
15 increase of 10.5% over the 1951 population. In 1951 the
16 total labour force was 2,280, which was 31% of the total
17 population. Of the total labour force 303, or 13%, were
18 employed in manufacturing and mechanical occupations;
19 and 491, or 22% were employed in transportation and
20 communication occupations.

21 North Sydney is the terminus of M.V. William Carson
22 operated by Canadian National Railways and providing
23 daily service with Port aux Basques, Newfoundland. The
24 significant proportion of the labour force employed in
25 transportation occupations in 1951 is indicative of the
26 importance of shipping. With the prospects for an
27 increasing volume of trade, additional job opportunities
28 should be available in stevedoring and related activities.

29 The North Sydney Marine Railway Co. Ltd., engaged
30 in shipbuilding and repairs is the largest



1 manufacturing concern. There are, however, other
2 secondary industries, including woodworking, food process-
3 ing, and two fish processing plants which do a substantial
4 business. A new plant to replace one destroyed by fire,
5 is being built by Industrial Estates Ltd., for Angel
6 Manufacturing and Supply Co. Ltd., for the manufacture
7 of stoves and foundry products, largely for the Newfound-
8 land market. There are no coal mines within the town
9 itself, and in the 1951 census only 154 were listed in
10 primary occupations other than agriculture. Of this 154
11 it is probable the great majority were coal miners working
12 in nearby mines, but this only makes up 7% of the total
13 labour force of the town.

14 Louisbourg, famous old town, I think it has an
15 interesting story, and a story that is very much worth
16 dwelling on. In this connection, there are no coal mines
17 in the vicinity of Louisbourg. It has been an important
18 port for shipping coal in the winter season, but it had
19 no particular development; was a very quiet community
20 before the war. During the war it had a big development
21 of ship repair, and then after the war that business went
22 down to virtually nothing.

23 The population of Louisbourg was 1,314 in 1956,
24 up 17.3% from 1,120 in 1951. In 1951 the labour force was
25 358, or 32% of the population. At this time 25, or 7% of
26 the labour force, were employed in manufacturing and
27 mechanical occupations. Of the 75 listed under primary
28 occupations, other than agriculture, many would be fisher-
29 men. There are no coal mines in the area, but Louisbourg
30 is the terminus of the Sydney and Louisbourg rail line



1 and, being an ice free harbour, is used for shipping coal
2 when other harbours are frozen over.

3 During the second World War L.H. Cann Company
4 Limited, a ship repair establishment, employed as many
5 as 300 men. The post-war period saw a steady decline in
6 the amount of business done, employment fell to 40 or 50,
7 and by 1956 the plant closed down completely.

8 Thus, after the war there was a surplus of labour
9 in the area. This combined with the advantages of an ice
10 free harbour, nearness to fishing grounds, rail connections
11 and the possibilities of an adequate water supply led to an
12 extensive fisheries development. Local, provincial and
13 federal governments and private industry co-operated in
14 providing these facilities. A wharf was built; water,
15 power and road connections were provided; freezing, cold
16 storage and fish meal plants were erected. Fish process-
17 ing plants were built by private companies, assisted by
18 loans from the provincial government. There are approx-
19 imately 130 fishermen and 170 employees in the shore
20 facilities at Louisbourg.

21 Louisbourg is a small example of what can be accomplished
22 in a community with a dying industry when circumstances
23 afford an opportunity for co-operation between government
24 and industry.

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1 When I say it is a small example, I do not mean
2 small, really, but small in terms of the problems with
3 which we are faced here today.

4 In 1951, approximately one-third of the labour
5 force of Cape Breton County was directly employed in the
6 coal industry. Although the number employed in the mines
7 has fallen by nearly 20% since then, there has been no
8 substantial change in the economic base. Glace Bay,
9 New Waterford, Sydney Mines, Dominion and the areas
10 surrounding these towns are based almost exclusively on
11 the coal industry. The mines in the Glace Bay and New
12 Waterford areas together produce 75% of the coal mines in
13 the County. Dominion has no coal mine within its bound-
14 aries but most of its labour force is employed in mining.
15 Sydney Mines is only slightly less dependent on the coal
16 industry.

17 Sydney and North Sydney are not directly dependent
18 on coal. There is the steel plant in Sydney, shipping
19 and shipbuilding in North Sydney, as well as other manufact-
20 uring in both centres. The Naval Base at Point Edward is
21 also an important factor in the economy of the area.

22 Thus the situation in the coal industry is not
23 simply a current problem in an individual industry. This
24 is a time of crisis for Cape Breton County when the
25 cumulative effects of a long term decline in employment,
26 and the immediate problems of marketing and production
27 costs now threaten its major industry, and whole commun-
28 ities that are solely dependent on a single source of
29 livelihood.

30 Judging from experience, it is difficult to place



1 new industries in coal-mining towns in Cape Breton. The
2 residents of these towns can, however, and frequently
3 do travel several miles to work and any new development
4 in the area is consequently helpful. The foregoing review
5 of other phases of the economy of the County reveals
6 opportunities for development. Apart from the measures
7 that are taken in relation to coal, all other feasible
8 developments should be vigorously promoted.

9 Expansion of the steel industry at Sydney is an
10 obvious industrial opportunity. The Government of
11 Nova Scotia has retained consultants to advise as to
12 how this industry can best be encouraged to expand.
13 Expansion of the steel industry should be a major policy
14 objective of all levels of government.

15 Fishing and fish processing should receive maximum
16 encouragement. That and other resources of the rural
17 area should be developed to the fullest possible extent.
18 Apart from agriculture, the principal known resources
19 are the forests and the beauty of the Island. The new
20 chemical pulp mill at the Strait of Canso will greatly
21 improve the market for forest products and improved
22 forestry practices should substantially increase forest
23 yields, over the years.

24 Tourist business in Cape Breton will undoubtedly
25 grow. It is the policy of the Government of Nova Scotia
26 to continue its substantial road-building program and to
27 assist financially in the development of tourist facilities.
28 While seasonal, the tourist industry can be an important
29 factor in the economy of Cape Breton Island.

30 On a matter directly under the control of the



1 Government of Canada, it is urged that consideration be
2 given to maximum use of the Point Edward Naval Base.

3 Later on I will be making more comments, of a more
4 general nature, applying to the coal mining counties
5 generally.

6 We go on to Inverness County. We deal with
7 Inverness County in this connection, not because of the
8 volume of its coal production today, or because of the
9 number employed in the coal mining industry in that part
10 of the country, both of which will be relatively small,
11 but rather because Inverness has been through the years
12 a coal mining county and it suffered its blows earlier
13 than the other counties. The very substantial coal
14 employment has largely disappeared, and the important
15 point is that nothing has taken place in that County,
16 to take the place of that employment with the result that
17 Inverness County has been one area in which the people
18 have been chronically unemployed.

19 For example, retail sales in the County in 1951
20 were only seven million four hundred and ninety-six
21 thousand eight hundred dollars, showing that the purchases
22 made in that County were below the Provincial average.

23 I think we can agree that a County that has
24 produced such distinguished sons as Inverness deserves
25 more consideration.

26 The brief points out that a very large percentage
27 of the people are employed in agriculture in Inverness.
28 We point out that there is a large area of productive
29 forests.
30



1 Since the first census in 1871 the population of
2 Inverness County has not had a steady pattern of growth
3 and, indeed, in 1951 was 21% below the population of
4 1871. From 1951 to 1956 the population dropped slightly,
5 going from 18,390 to 18,235. In 1956, 51.9% of the
6 population was in the age group from 15 to 65 years,
7 which was considerably less than 57.6% for Nova Scotia
8 and the 59.8% for Canada.

9 In 1951 the total labour force of Inverness County
10 was 5,978, of which women accounted for only 14%. The
11 labour force was a smaller proportion of the population
12 than that for the Province or Canada as a whole. These
13 conditions reflect the preponderance of primary industry.

14 Table I gives the distribution by industrial group
15 for 1951. Compared with the labour force of Nova Scotia,
16 fewer people are employed in manufacturing.

17 Retail sales for the County were \$7,496,800 in 1951,
18 which was only 1.9% of the Provincial total. For this
19 same year the County has 2.9% of the Provincial total
20 population.

21 Besides mining, the other resource industries are
22 agriculture, forestry and fishing. In 1956 there were
23 1,829 farm operators supporting a total farm population
24 of 9,180. In 1951 employment in agriculture made up 35%
25 of the total labour force but from 1951 to 1956 the number
26 of farm operators declined by over 300.

27 Inverness County has 629,433 acres of productive
28 forests, which is 78% of the total county area. Forest
29 production for 1957 is given in Table II

30 Future production of mine packs will depend on the



1 future of mining, but an increase for pulpwood seems
2 likely, particularly with the establishment of the pulp
3 mill in the Canso area. Softwood lumber production was
4 particularly low in 1957 but pulpwood showed an increase.
5 In 1951 there were 441 employed in forestry and logging
6 industries. Since 1951 the number has probably not
7 increased, but is expected to grow in the next few years.
8 In 1957 there were 99 employed in sawmills and planing
9 mills, besides those employed in the woods.

10 In 1958 the total quantity of fish landed in Inverness
11 County was 11,585, 700 lbs., and the landed value was
12 \$634,156.00. In 1957 there were 675 fishermen and
13 another 177 were employed in fish processing plants, both
14 figures being for seasonal employment. In the past few
15 years the number of fishermen has declined but production
16 has increased slightly. This production trend can be
17 expected to continue in the future and some increase in
18 employment in fishing processing is expected.

19 We give a good deal of detail about Inverness
20 County, about the distribution of the labour force,
21 and about the various communities. I should emphasize,
22 sir, that when we consider Inverness in relation to
23 coal mining, we should bear in mind that the population
24 directly concerned in connection with coal mining has
25 been concentrated in one or two areas, and is therefore
26 of very great significance.
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TABLE I

Labour Force by Industrial Group, 1951

Industrial Group

All Industries	No.	5,140	836	178,087	42,719
	%	100.0	100.0	100.0	100.0
Agriculture	No.	2,032	50	22,787	544
	%	40.0	6.0	13.0	1.3
Forestry & Logging	No.	434	7	5,822	91
	%	8.5	.8	3.3	.2
Fishing & Trapping	No.	345	1	9,736	33
	%	6.8	.1	5.6	.1
Mining & Quarrying	No.	367	4	15,465	105
	%	7.2	.5	8.8	.3
Manufacturing	No.	494	114	32,465	4,464
	%	9.7	13.7	18.5	10.6
Electricity, Gas & Water	No.	62	-	2,390	179
	%	1.2	-	1.4	.4
Construction	No.	401	1	16,217	175
	%	7.9	.1	9.3	.4
Transportation & Communication	No.	336	22	16,515	1,654
	%	6.6	2.7	9.4	3.9
Trade	No.	328	80	20,948	9,121
	%	6.5	9.6	12.0	21.6
Finance	No.	20	15	2,047	1,512
	%	.4	1.8	1.2	3.6
Service	No.	263	536	30,617	24,276
	%	5.2	64.6	17.5	57.6

Source: Census of Canada, 1951.



Table II

Forest Production in Inverness County, 1957

Sawn timber - Softwood	5,614,000 m.b.f.
Hardwood	545,000 m.b.f.
Pulpwood	51,790 cords
Railway ties	4,450 pieces
Mine packs	599,000 m.b.f.
Pit props	3,546 cords
Laths	60 thousands

Source: Report of the Department of Lands and Forests 1958

In 1957 manufacturing industries employed only 284, under 1% of the Provincial total, and the majority of these were employed in the primary operations of fish processing (177) and sawmills (94). The lumber industry should grow moderately with further development in the pulpwood industry, rather than be displaced by it, and some new job opportunities are expected in the fish processing plants.

Cape Breton Island is well known for its natural beauty, historic sites and for hunting and fishing, all strong attractions to the tourists. The Cabot Trail is a famous route, which goes through the Cape Breton Highland National Park located partly in northern Inverness County and partly in northern Victoria County. At Ingonish, Victoria County, within the National Park, is the Keltic Lodge operated by the Provincial government. The Alexander Graham Bell Museum, operated by the Government of Canada at Baddeck on the Bras d'Or Lakes is also a factor in the tourist industry. It is likely that tourist business will increase in Inverness as in other



1 parts of Cape Breton Island.

2 At the end of 1959, there were three mines being
3 operated and production for the year was 59,627 tons,
4 or approximately 1% of the Provincial total. Table IV
5 gives data for selected years since 1946. There have been
6 fluctuations in production, but generally the trend has
7 been downward.



Table III
Principal Statistics on Manufacturing in Inverness County, 1957

Industry	Number of Establishments	Supervisory and Office Employees	Production Workers	Cost at Plant of Materials Used		Selling Value of Factory Shipments
				Number	Wages (\$000)	
		Number	Salaries (\$000)			
INVERNESS COUNTY						
Fish processing	5	12	19	165	162	739
Sash, door, planing mills	3	3	7	2	2	8
Sawmills	31	36	25	84	84	337
Other Industries	3	5	8	6	6	71
						915
						17
						596
						107
Total						
	42	56	59	254	254	1,155
						1,635
NOVA SCOTIA						
Sash, door, planing mills	60	141	426	1,406	1,406	4,724
Sawmills	526	662	689	2,938	2,938	9,938
						7,506
						17,579
Total						
	1,356	5,253	17,775	72,859	72,859	238,287
						427,299

Source: The Manufacturing Industries of Canada, Geographical Distribution, 1957



Table IV

Production and Employment in Inverness County for
Selected Years.

<u>Year</u>	<u>Production</u>	<u>Labour Force Last Month of Oper.</u>
1946	92,513	283
1950	79,342	317
1951	64,613	287
1953	66,108	242
1957	60,332	210
1958	54,977	180
1959	59,627	135

Source: Department of Mines, Annual Reports.

Total employment in Inverness County for all coal companies, considering the last month of operation for each, was 135 in 1959, or approximately 2% of the Provincial total. It declined steadily since 1950, as indicated by Table IV, mainly due to the closing of mines. In the period between 1946 and 1959, 19 mines operated at one time or another, sixteen have closed since 1946. Another factor is increased mechanization and the increase in production per man-day.

There are only two towns within the county:
Inverness and Port Hawkesbury.

Inverness had a population of 2,026 in 1956, down over 14% from 1951. The labour force was only 29% of the 1951 population, with few employed in manufacturing occupations. Available statistics indicate that 30 to 35 per cent of the labour force was employed in coal mining and alternative lines of employment in the town and surrounding area are limited.



1 Port Hawkesbury had a population of 1,078 in
2 1956, up slightly from 1951. The labour force was 32%
3 of the 1951 population. There are a few sawmills within
4 the area, but the largest employer in the town is a
5 ship repair establishment with approximately 25 employees.
6 The new pulp mill should greatly increase employment
7 opportunities for the area in general and Port Hawkesbury
8 in particular.

9 Besides the Town of Inverness, other communities
10 which presently have coal mines are Saint Rose and Port
11 Hood, employing 71 in 1959. Port Hood has harbour
12 facilities, and if the causeway is completed to the
13 island conditions would then be favourable for a fishery
14 development.

15 At present the only significant fish processing
16 plants in Inverness County are the co-operatives at Cheticamp
17 and Grand Etang. The plants were established after
18 1955 with substantial assistance (technical and financial)
19 from the Provincial government. There was also some
20 assistance given in expanding the fleet of long liners.
21 Seasonal employment for approximately 120 is provided
22 in the short facilities. Employment should increase
23 slightly provided there are further increases in the
24 quantity of fish landed. There is some fishing (mainly
25 lobsters) done south of Grand Etang (at communities
26 such as Port Hood, Margaree and Judique) but at
27 present this is brought in to the plants at Cheticamp
28 and Grand Etang. In 1959 a new method of fishing in
29 Nova Scotia, known as Danish seining, was used with boats
30 based at these ports.



On page 35 in summary, we review and summarize the considerations with regard to Inverness, and while we point out that various industries should continue to develop, there will be expansion of fisheries and expansion of forestry, nevertheless there is no indication that those things in themselves will supply sufficient employment in Inverness, unless new industry can be attracted there.

An estimate of only 5 or 6 per cent of the labour force of Inverness County was employed in the coal industry in 1951, but this was concentrated mainly in one area. Since 1951 the number employed in the coal mines has fallen by over 50% but production has remained relatively constant. Approximately 1% of the coal produced in Nova Scotia, and nearly 2% of the total employed in the coal mines of Nova Scotia, was within Inverness County. As production per man-shift would appear to be at least as high as the average for Nova Scotia, the above percentages indicate under-employment of the miners.

The Town of Inverness and the nearby communities of St. Rose and Port Hood have economies based very nearly exclusively on the coal industry. Apart from a few sawmills there are practically no other industries in the area. There are a few who fish part time but the fish is taken up to Grand Etang or Cheticamp for processing. Circumstances would seem favourable to developing a fish processing plant in the Port Hood area. At best, however, the opportunities for employment would not be numerous.

The coal industry in Inverness County while not large in comparison with Cape Breton County is important



1 because of its concentration and the lack of alternative
2 employment for displaced miners. Every effort should
3 be made to develop the available natural resources. The
4 road-building program of the Province will contribute to
5 such development as well as to encouragement of the
6 tourist industry. Financial assistance for the construc-
7 tion and improvement of accommodation will be continued
8 and it is expected that increased tourist business will
9 add to the economy.

10 We go on to Pictou County, and I will proceed as
11 quickly as I can in order not to trespass too much upon
12 your time.

13 I do feel it is important that the Commission
14 have the whole picture with regards to these counties
15 particularly concerned. We set forth the population
16 growths in Pictou County. We show that Pictou County has
17 a larger population of its labour force employed in
18 manufacturing and in mining, than in other parts of the
19 Province, and relatively fewer in fishing, construction,
20 and servicing, and we give some information regarding
21 agriculture and forestry and so on. I hope this infor-
22 mation contained in this Submission will prove to be
23 helpful to the Commission.

24 Since the first census in 1871 to the census in
25 1951 the population of Pictou County increased by 37%,
26 only slightly below the average for the Province. By
27 1956 the population was 44,566, up only slightly from
28 1951 and at a rate of growth substantially below the
29 average for the Province.

30 Table I gives the labour force by industrial group



1 and by sex for 1951. Compared with Nova Scotia, a
2 larger proportion of the labour force of Pictou County was
3 employed in manufacturing and mining, and relatively
4 fewer in the fishing, construction and service industries.
5 Since then, employment in the mines has fallen to approx-
6 imately 500.

7 Regarding electric power, most of Pictou County is
8 served by the Pictou County Power Board, which purchases
9 power mainly from the thermal generating plant at Trenton;
10 there is a connection with the eastern network of the
11 Nova Scotia Power Commission, with hydro at Sheet Harbour
12 and now, with Cape Breton Island via the Provincial grid.

13 Agriculture is of about the same significance to
14 the Pictou County economy as it is to the economy of
15 Nova Scotia generally and in 1951 the farm labour force
16 was 1,659, approximately 11% of the county total. The
17 1956 statistics indicate a decline in employment in
18 agriculture, and it is not anticipated that there will
19 be an increase in the next few years.

20 Pictou County has 525, 579 acres of productive
21 forests, which is 75% of the total County area. Forest
22 production for 1957 is given in Table II.
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Table I

Labour Force by Industrial Group, 1951

Industrial Group

All industries	No.	12,171	2,888	178,087	42,719
Agriculture	No.	1,607	52	22,787	544
	%	13.3	1.8	13.0	1.3
Forestry & Logging	No.	284	11	5,822	91
	%	2.3	.4	3.3	.2
Fishing & Trapping	No.	334	-	9,736	33
	%	2.7	-	5.6	.1
Mining & Quarrying	No.	1,830	12	15,465	105
	%	15.2	.4	8.8	.3
Manufacturing	No.	3,676	335	32,465	4,464
	%	30.5	11.7	18.5	10.6
Electricity, Gas & Water	No.	139	13	2,390	179
	%	1.2	.5	1.4	.4
Construction	No.	748	15	16,217	175
	%	6.2	.5	9.3	.4
Transportation & Communication	No.	1,178	135	16,515	1,654
	%	9.8	4.7	9.4	3.9
Trade	No.	1,289	671	20,948	9,121
	%	10.7	23.5	12.0	21.6
Finance	No.	127	89	2,047	1,512
	%	1.1	3.1	1.2	3.6
Service	No.	843	1,530	30,617	24,276
	%	7.0	53.4	17.5	57.6

Source: Census of Canada, 1951.



Table II

Forest Production in Pictou County 1957

	<u>Quantity</u>
Sawn timber - Softwood	23,064,000 m.b.f.
- Hardwood	1,688,000 m.b.f.
Pulpwood	9,700 cords
Railway ties	13,497 pieces
Mine Packs	2,178,000 m.b.f.
Pit props	3,967 cords
Laths	553 thousands
Veneer logs	77,000 m.b.f.

Source: Report of the Department of Lands and Forests 1958

Pulpwood production is not high, but like the other Counties discussed, this is the area of forestry production that is likely to increase. In 1951 there were 295 employed in forestry and logging activities and in 1957 there were 469 employed in the sawmills and planing mills.

In 1952 the total quantity of fish landed in Pictou County was 3,701,000 lbs., and the landed value was \$560,000. In 1958 the quantity landed was 2,784,000 lbs., and the landed value was \$594,744. The number of fishermen fell slightly from 644 in 1952 to 627 in 1957.

Approximately 90% of the total landed value of fish is derived from lobsters. With the application of more capital, the fishing industry of the county could probably increase production but it is doubtful that many more fishermen would be required. Fish processing employed 181 in 1957 (this figure is included under manufacturing) and here, employment is expected to increase moderately..



1 Table III gives an indication of the significance
2 of manufacturing to the economy of Pictou County. It is
3 important to note that under the largest classification of
4 "other industries" will be included the Dosco heavy
5 steel operations in Trenton. Apart from steel and foundry
6 operations under "other industries" the industries next
7 in size (referring to selling value of products and
8 employment) are: sash, door and planing mills; sawmills
9 and fish processing plants. Because of the Dosco
10 establishments, Trenton is the town with the largest
11 production and employment, having nearly one-half of
12 the manufacturing employment for the County and two-thirds
13 of the selling value of products. The rural area has a
14 large number of the establishments (mainly sawmills), but
15 only a small proportion of the County's total employment
16 and selling value of products. For the County, the
17 selling value of production was 11.6% of the Provincial
18 total; and employment was 11.9% of the Provincial total.
19 Thus, Pictou County has a significant portion of the
20 Province's manufacturing.



Principal Statistics on Manufacturing in Pictou County, 1957

Table III

Industry	No. of Establishments	Supervisory & Office Employees	No. Employees	Salaries \$'000	Production No.	Workers Wages \$'000	Cost at Plant of Materials Used \$'000	Selling Value of Factory Shipments \$'000
PICTOU COUNTY								
Bakeries	8		10	25	30	42	137	241
Fish processing	4		15	91	166	217	960	1,289
Furniture	5		11	47	73	125	385	687
Milk pasteurizing plants	4		9	28	43	105	508	742
Publishing & periodicals	5		-	-	-	-	4	4
Printing & bookbinding	4		6	9	11	21	23	82
Sash door & planing mills	4		33	136	137	308	921	1,438
Sawmills	39		42	46	127	209	853	1,372
Soft drink Manufacture	3		8	26	21	34	159	430
Other industries	31		393	1,511	2,611	8,489	26,064	43,311
Total	107		527	1,919	3,219	9,550	30,016	49,595
NEW GLASGOW								
PICTOU	31		149	674	799	2,133	4,445	10,339
STELLARTON	10		84	271	485	1,390	2,278	4,583
TRENTON	11		25	66	67	138	649	985
WESTVILLE	8		211	773	1,591	5,489	20,748	30,911
RURAL	3		2	3	5	8	44	67
	44		56	132	272	390	1,857	2,710

Source: The Manufacturing Industries of Canada, 1957, Geographical Distribution.



1 On page 40 we set out the figures of coal production
2 for certain years since the war. We also set forth
3 the labour force, and it will be seen from these figures
4 that since 1946 the labour force employed in coal mining
5 in Pictou County has dropped by about one thousand, some
6 one thousand five hundred and eighty-eight to five hundred
7 and thirty-three. It will be clear from the rest of
8 the submission regarding Pictou County that there has
9 been no development in the County to supply alternative
10 employment to most of these men involved.

11 We also point out that the coal fields in Pictou
12 County have been developed to a very substantial extent.
13 We mention that the origin of the coal has given rise
14 to wide variations in the quality of the coal there,
15 and that some of the coal at least is relatively high
16 in ash content.

17 During both 1958 and 1959 there were three coal
18 companies operating mines in Westville and in Thorburn.
19 Production and employment figures for selected years
20 since 1946 are set out in Table IV. In 1946 the County
21 had 10.8% of the Provincial total, and 5.8% in 1959.
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Table IV

Production and employment in Pictou County for selected years

Year	Production	Labour Force Last Mo. of Oper.
1946	580,887	1,588
1950	687,599	1,475
1951	640,261	1,698
1953	530,920	1,096
1957	270,927	793
1958	280,073	556
1959	256,885	533

Source: Department of Mines, Annual Reports

Employment in coal mining has likewise fallen. As a percentage of the Provincial total, the county's employment made up 11.9% in 1946, and 6.6% in 1959. Production per man shift has generally not increased in the Pictou County mines at a rate comparable with other mines in the Province and in 1958 was somewhat lower than the Provincial average.

The bulk of the coal mined in Pictou County is sold in Nova Scotia, a large user being the Nova Scotia Power Commission's plant at Trenton. There is some marketed in Central Canada by Acadia Coal Co. Ltd., but railway sales are now insignificant.

The Pictou coal field has its centre at Stellarton. The field extends about 6 miles to the east beyond Thorburn, and westward to about 3 miles beyond Westville, and is about 3 miles across in the north-south axis.

The mode of origin has given rise to wide variations in the quality of the coal. In particular the coal has



1 a relatively high ash content, the ash being dispersed
2 throughout the coal, with the result that its removal by
3 hand picking and simple preparation is difficult.

4 Another result of the origin is a high possibility of
5 spontaneous combustion, a factor which has been a def-
6 inite hazard in the Pictou field, particularly in the
7 Stellarton workings.

8 We mention on page 41 that the Pictou coal fields
9 have been the most extensively exploited coal fields in
10 Canada, and there are I believe a substantial number of
11 relatively small seams, but I believe it is generally
12 agreed that there is only one substantial reserve of
13 coal that has not been worked, and that is known generally
14 as the Westville main seam and reference is made to that.

15 There has been a good deal of anxiety in Pictou
16 County in recent years in attempting to open that seam,
17 and no doubt representatives from the County will present
18 certain views to the Commission in that regard. I might
19 simply say that it has been the policy of the Government
20 to attempt in every way to co-operate in opening that
21 seam.

22 The Pictou coal field in relation to its size is
23 the most extensively exploited coal field in Canada,
24 some 75 million tons having been mined in the area over
25 a period of 125 years (as of 1946). As a result of this
26 extensive mining, most of the readily accessible coal
27 has been removed, and the field has now arrived at what
28 might be termed its final stage of commercial operation.
29 The Acadia Coal Company estimated developed reserves at
30 13,540,000 long tons and other coal resources at 14,400,000



1 long tons, giving a future life for the field of
2 between 40 and 50 years (as of 1946).

3 The possibility of opening the Westville main
4 seam is being studied by a committee in Pictou County.

5 We go on to describe the economics in the different
6 towns, and it will be apparent how much dependence is
7 placed on the manufacturing industry in the county which
8 is quite substantial, and how much it fluctuates. A
9 great deal of the Industrial employment depends upon
10 ship building which goes up and down, upon the manufact-
11 uring industries for railways which fluctuates very
12 violently, so here again we have seen a substantial
13 decline in actual employment.

14 We point out that the primary industries are not
15 likely to see much expansion, with the possible
16 exception of forestry, and that is not likely to create
17 too much in the way of job opportunities, and we empha-
18 size the fluctuation in the manufacturing industry.

19 Here again we emphasize the need for alternative
20 employment. The same story applies in Cumberland, and
21 it is more acute insofar as Springhill is concerned.
22 Our submission shows the decline in coal mining employ-
23 ment in Cumberland.

24 New Glasgow, the largest town in the county, had a
25 population of 9,998 in 1956, up slightly from 1951. The
26 labour force was 3,871, which was 39.0% of the population,
27 - a comparatively large percentage. New Glasgow is the
28 commercial centre of the area, involving relatively more
29 employment in trade and service occupations. A substan-
30 tial proportion of the labour force is employed in manu-



1 facturing, both light and heavy industry.

2 Pictou, across the harbour from the other towns,
3 had a population of 4,564 in 1956, up 7% from 1951. The
4 labour force in 1951 was 1,349, making up 32% of the
5 population. Pictou is also a commercial centre, for
6 the western part of the county. Again, manufacturing
7 occupations are important in the labour force. Shipbuild-
8 ing and repair is the chief single source of employment
9 in the town and late in 1959 employed between 250 and
10 300 men.

11 Stellarton had a population of 5,445 in 1956, down
12 slightly from 1951. In 1951 the total labour force was
13 1,947, or 35% of the population. Compared with New
14 Glasgow and Pictou, Stellarton has a smaller proportion
15 of its labour force in service and commercial operations,
16 and somewhat less in manufacturing. Recently a new text-
17 ile plant was opened in the area which employs about 75
18 women but not all of these employees come from Stellarton.
19 Mining has been of substantial importance to the town in
20 years past and in 1951 still employed over a quarter of
21 the total labour force. Since then all mines in the town
22 have been closed and there are few industries in Stellar-
23 ton to take up the large number laid off from the mines.

24 Westville, the other coal mining town of the
25 County, had a population of 4,247 in 1956, down slightly
26 from 1951. Of the 1951 population, there were 1,425, or
27 33% of the labour force. Of the total labour force rel-
28 atively less than the other towns were employed in manuf-
29 acturing and these would probably be in industries in the
30 other towns. As with Stellarton, coal mining has been the



1 major source of employment, and in 1951 engaged a very
2 substantial part of the labour force. The one remaining
3 industry consists of the reduced operation of the Drummond
4 Coal Co. Ltd.

5 The remaining town, Trenton, had a population of
6 3,240 in 1956, up nearly 5% from 1951. In 1951, there
7 were 1,028, or 33% of the population, in the labour force;
8 and of this number the majority were employed in manufact-
9 uring. The Dosco steel operations (producing railway
10 and mine cars, forgings, - structural and axle, machine
11 work) are the chief employer and draw labour from the
12 surrounding towns as well. Employment depends heavily on
13 orders from the railways and these fluctuate greatly from
14 year to year, and indeed from season to season.

15 The village of Thorburn has a population estimated
16 at 1,200¹ and, along with Westville and Stellarton has been
17 and still is involved in coal mining. Here, unlike West-
18 ville and Stellarton, production and employment have
19 increased rapidly since the war but have levelled off
20 during the past four years. Employment was 74 in 1946
21 and 448 at the end of 1959. Assuming one-third of the
22 estimated 1,200 population is actively employed, this
23 would indicate practically total dependence on the coal
24 mines.

25 Approximately 12% of the labour force of Pictou
26 County was employed in the coal industry in 1951.² From
27 1951 to the end of 1959 this number has fallen from 1,698
28 to 533, and production fell from 640,261 tons to 256,885
29 tons. The towns of Westville and Stellarton have in the
30 past had economies based on the coal industry.



1 There have been few new job openings in these towns
2 to lessen the pool of unemployment caused by the decline
3 in coal.

4 1. An estimate given by the C.N.R. in their Industrial
5 Survey of the East River Valley of Pictou County.

6 2. Based on the Department of Mines figure of 1,698
7 employed in coal mines, the 1951 census figure of
8 1,842 employed in mining and quarries, and the
9 1951 census figure for the total labour force.

10 The Towns of New Glasgow, Pictou and Trenton are
11 not directly dependent on coal mining. However, both
12 Pictou and Trenton and New Glasgow to a lesser degree, have
13 employment levels most susceptible to changes in business
14 conditions and government policy.

15 The primary industries other than coal are also
16 important to the county but, with the exception of forest-
17 ry, are not likely to create new job opportunities. The
18 success of certain secondary industries in the past sugg-
19 ests further possibilities in this field. In transport-
20 ation equipment, railway rolling stock and shipbuilding,
21 where public policy has a direct bearing, greater stability
22 in employment is a feasible objective. This in itself
23 would do much to improve the economy of the area. The
24 tourist industry also, while not adding greatly to job
25 opportunities in itself, will contribute to the economy.

26 The Government's policy of direct encouragement
27 to the tourist industry, along with a continuation of the
28 road-building program will benefit this business as well
29 as industry generally in the County. It is obvious, how-
30 ever, that more secondary industry is required to provide



1 employment for the labour force. Industrial Estates
2 Limited is developing a group site for such industries
3 between Stellarton and Westville.

4 Since the first census of 1871 until 1951 the
5 population of Cumberland County increased by about 40%,
6 a rate of growth similar to that for Nova Scotia generally.
7 In 1951 the labour force was 12,739, representing 32.2%
8 of the population compared with 34.4% for Nova Scotia and
9 37.0% for Canada. Between then and 1956 the population
10 fell slightly to 39,598.

11 Table 1 gives the labour force by industrial group
12 and by sex for 1951. This table shows manufacturing the
13 leading industry and, compared with Nova Scotia, a much
14 larger proportion of the labour force employed in mining
15 and quarrying. Employment in coal mining has since
16 fallen to less than 300.

17 Regarding electric power, in the western end of
18 Cumberland County, the Canada Electric Company generates
19 power at a thermal plant at Maclean. They also distribute
20 in this area and sell power to the Edison Electric Light
21 and Power Company who distribute in the Springhill-Oxford
22 area. The eastern end of the County is served by the Nova
23 Scotia Light and Power Company, Northern Division, which
24 purchases most of its power from the Nova Scotia Power
25 Commission.

26 Retail sales for Cumberland County were \$23,392,600
27 in 1951, which was 5.9% of the Provincial total. For the
28 same year the County had 6.2% of the population.

29 Besides coal, Cumberland County also has two salt
30



1 mines. In the next few years there will be an increase
2 in production at Pugwash but employment is not expected
3 to grow. Indications are the mine will have a long life
4 as there is an estimated 200,000,000 tons of reserve and
5 it could provide the raw material for a chemical industry
6 if sufficient market develops.

7 Agriculture is of more significance than it is to
8 the economy of Nova Scotia generally. With a labour
9 force of 2,080 in 1951 it made up over 16% of that for
10 the County. The 1956 statistics indicate a decline in
11 farm employment and the trend of increasing equipment and
12 decreasing labour force seems likely to continue.

13 Cumberland County has substantial production of
14 forest products. A recent survey of resources showed that
15 forest land amounted to 821,386 acres, or 76% of the total
16 land area. Production in 1957 is given in Table II.



Table I

Labour Force by Industrial Group, 1951

Industrial Group

All Industries	No.	10,513	2,226	178,087	42,719
Agriculture	No.	2,041	39	22,787	544
	%	19.7	1.8	13.0	1.3
Forestry & Logging	No.	643	13	5,822	91
	%	6.2	.6	3.3	.2
Fishing & Trapping	No.	130	-	9,736	33
	%	1.2	-	5.6	.1
Mining & Quarrying	No.	1,904	8	15,465	105
	%	18.4	.4	8.8	.3
Manufacturing	No.	2,169	336	32,465	4,464
	%	21.0	15.4	18.5	10.6
Electricity, Gas & Water	No.	105	13	2,390	179
	%	1.0	.6	1.4	.4
Construction	No.	726	9	16,217	175
	%	7.0	.4	9.3	.4
Transportation & Communication	No.	701	67	16,515	1,654
	%	6.8	3.1	9.4	3.9
Trade	No.	1,046	419	20,948	9,121
	%	10.1	19.2	12.0	21.6
Finance	No.	108	74	2,047	1,512
	%	1.0	3.4	1.2	3.6
Service	No.	766	1,209	30,617	24,276
	%	7.4	55.3	17.5	57.6

Source: Census of Canada, 1951



Table II

Forest Production in Cumberland County 1957

	<u>Quantity</u>
Sawn timber - softwood	25,539,000 m.b.f.
- hardwood	1,794,000 m.b.f.
Pulpwood	22,500 cords
Railway ties	38,876 pieces
Mine packs	4,990,000 m.b.f.
Pit props	4,551 cords

Source: Report of the Department of Lands & Forests 1958

In 1951 656 were shown by the Dominion Bureau of Statistics as employed in forestry and logging operations, or 5% of the total labour force. In 1957 there were 363 employed in sawmills and planing mills, besides those engaged in woods operations.

In the fisheries, most of the landed value is derived from lobsters. The total quantity of fish landed in 1958 was 2,406,600 lbs. and the value was \$519,766, representing a substantial increase in the past few years. Employment in the industry, however, actually declined from 549 in 1952 to 478 in 1958, indicating a higher landed value per man over the period.

Regarding manufacturing, within Cumberland County the industrial group with the largest selling value of factory shipments includes those establishments producing iron and steel products. This group is followed by wood products, and foods and beverages, in that order. (Table III).

Within Cumberland County during 1958 there were mines in three different communities. This was reduced to two when the Cumberland Railway and Coal Company Ltd.,



Table 111

Principal Statistics on Manufacturing in Cumberland County

Industrial Group	Estab- lishments No.	Supervisory & Office employees Number	Salaries \$'000	Production Workers Number	Wages \$'000	Materials Used \$'000	Cost at Plant of Selling Value of Factory Shipments \$'000
CUMBERLAND COUNTY							
Foods & Beverages	18	33	108	148	253	1,642	2,374
Wood Products	59	75	113	288	481	2,402	3,696
Printing, Publishing	4	24	59	33	71	56	291
Iron & Steel Prod.	5	76	328	452	1,513	2,959	6,058
Other Major Groups	8	38	147	552	1,400	1,563	5,341
Total	94	246	755	1,473	3,717	8,623	17,760
AMHERST							
OXFORD	22	132	513	984	2,841	4,955	10,876
PARRSBORO	66	11	34	74	136	525	811
SPRINGHILL	3	4	6	8	10	53	82
RURAL	6	9	19	11	28	86	177
Total	57	90	184	396	701	3,003	5,815
NOVA SCOTIA							
Fods & Beverages	350	1,274		7,394	14,377	66,954	105,589
Wood Products	659	916	1,411	2,941	5,426	17,207	30,139
Printing, Pub.	140	666	1,928	797	2,245	2,868	10,721
Iron & Steel Prod.	54	905	4,024	5,937	21,988	45,592	81,544
Total	1,356	5,253	17,775	26,277	72,859	238,287	427,299



1 ceased operations after the disastrous "bump" at
2 Springhill in October, 1958.

3 Table IV gives production and employment figures
4 for selected years since 1946. In that year the County
5 had 15.2% of the total coal production of the province,
6 whereas in 1958 it had only 7.5%, and in 1959 it was
7 down to approximately 2%.

8 On page 48 the submission shows that in 1946
9 there were over 2,000 men employed in coal mining in
10 Cumberland County, and the figures for 1957 show only 241.

11 You can well imagine the impact of such a change
12 upon the economy of a County.

13 We analyze the economy of a County in some detail,
14 and again we have to reach the conclusion after going
15 over the County that the only hope of expansion of employ-
16 ment would be from new industries being placed in the
17 County. We point out that there is already a substantial
18 amount of manufacturing in the County, but more will be
19 needed to do the job.

20 Table IV

21 Production and employment in Cumberland County for Selected

<u>Year</u>	<u>Years</u>	<u>Labour Force</u>
	<u>Production</u>	<u>Last Month of Operation</u>
23 1946	813,734	2,064
24 1950	781,100	1,556
25 1951	804,904	1,613
26 1953	730,425	1,636
27 1957	487,293	1,143
28 1958	395,389	1,127
29 1959	93,981	241

30 Source: Department of Mines, Annual Reports



1 Since the two mine disasters in Springhill, the Cumberland
2 Railway and Coal Company Ltd., has given up all operations
3 and rights in the area. However, a new company, Springhill
4 Coal Mines Ltd., - with assistance from the Provincial
5 Government - is presently going forward with plans to
6 open a mine. Operations should be underway by May of
7 1960. Facilities will be such that a production of 500
8 tons per working day will be possible.

9 The total number employed by the coal companies
10 of Cumberland County declined from over 2,000 in 1946,
11 to slightly over 1,100 in 1958, and was only 241 at the
12 end of 1959. The new mine in the Springhill area is
13 initially expected to provide employment for 100 men and
14 later for 150 to 200 men if a market for this tonnage is
15 available. In 1958 production per man shift in Cumerland
16 County was below the average for the Province.

17 The Cumberland Railway and Coal Company Ltd.,
18 which has now ceased operations shipped coal within Nova
19 Scotia, to New Brunswick, Quebec and for railway use.
20 In 1959, there were no shipments from the County to
21 Quebec, and only very small amounts to New Brunswick,
22 Prince Edward Island and the Railways.

23 There are two separate coal areas in Cumberland
24 County; one in the Springhill district and one in the
25 Joggins district, the main resources being found in the
26 former area.

27 In the Springhill district, the presence of strong
28 sandstone strata above and below the coal seams provides
29 good conditions for extracting coal but the nature of
30 the measures presents a serious handicap to deep mining



1 operation. The strata cause what are known as "bumps",
2 and the seriousness of this was fully realized in October
3 of 1958. The coal is classified as high volatile "A"
4 bituminous coal, and is a good coking coal. Coal has been
5 extracted for 90 years and the more readily accessible
6 coal has been mined.

7 Amherst, the largest town in the County, had a
8 population of 10,301 in 1956, up 4.4% from 1951. The
9 labour force was 3,418 in 1951, 34.6% of the population,
10 with a good proportion employed in manufacturing.

11 The town has a preponderance of heavy industry,
12 such as structural steel, heating equipment and aircraft
13 parts, but there is also some light industry. There is
14 a salt plant at Nappan, only a few miles from Amherst,
15 which employs approximately 100 men.

16 The next largest town, Springhill, had a population
17 of 7,348 in 1956. In 1951 the labour force was 2,236
18 or 31.3% of the population. Between 50 and 60 per cent
19 of the labour force was employed in coal mining. However,
20 after the two mine disasters, in 1956 and 1958, mining
21 operations ceased. As a means of rehabilitating some
22 of the miners, a new company has been granted permission
23 to mine coal in the Springhill area. In addition,
24 Springhill Development Corporation was established by
25 the Government of the Province to offer special inducements
26 for secondary industry to locate in Springhill. Its
27 operations are dealt with elsewhere in this Submission.
28 The Government of Canada is proceeding with the establish-
29 ment of a penitentiary in Springhill.
30



Parrsboro had a population of 1,849 in 1956, down 3.0% from 1951. It has long been a seaport and had been used for shipping Springhill coal as well as pulpwood and lumber. However, the rail line to Parrsboro has not operated now for several years. The stable industries of the area are pulpwood cutting, lumbering and farming with a relatively small number employed in other manufacturing.

Oxford had a population of 1,545 in 1956, up 5.4% from 1951. Of the total labour force a substantial proportion was employed in manufacturing and the chief products are: lumber, furniture, woodworking machinery and dairy products.

The communities of Joggins and nearby River Hebert have operating coal companies. Total employment in the coal mines of the Joggins area was 499 in 1946 and 242 in 1959.

Apart from a lumber mill and a creamery, both in River Hebert, there is little other industry in these communities.

An estimated 13% of the labour force of Cumerland County was employed in the coal industry in 1951, but since then both production and employment have fallen drastically. The town of Springhill, and the small communities of Joggins and River Hebert (to a lesser degree), have in the past had economies based mainly on the coal industry.

Oxford, and more particularly Amherst, are more diversified and their central location in the Atlantic



1 Provinces should continue to be a factor favourable to
2 growth. In the rural areas employment is not likely
3 to increase in the primary industries with the possible
4 exception of forestry. Manufacturing has for some years
5 been the largest source of employment in the County and
6 recent reduction in coal mining have increased its
7 relative importance. It is clear that additional manuf-
8 acturing is necessary in order to absorb the labour force.

9 Tourist business is expected to increase. Cumber-
10 land County is well located in regard to this industry
11 as the majority of tourists enter Nova Scotia via Amherst.
12 The Government's program of direct encouragement to
13 the tourist industry and the continuation of its road
14 building program will benefit this as well as other
15 industries in this area.

16 The next chapter of the Submission goes back to
17 the general problem. We consider the prospect for coal
18 and we give some reason for believing that in the years
19 ahead the market for coal as such should expand very
20 substantially. The important element in the picture both
21 in the United States and Canada is the projected rate of
22 growth in electricity in the years ahead, and it is
23 regarded as likely to produce a very substantial effect
24 on coal, because it is expected that much of the power
25 in future will be generated from bituminous coal.

26 Before dealing with the question of markets for
27 Nova Scotia coal, it will be useful to refer briefly to
28 coal in the total fuel and energy picture in Canada. It
29 is recognized that your Commission will have access to
30



1 the same and additional authoritative sources for the
2 past, present and possible future pattern of consumption
3 and supply. Suffice it then to refer briefly to several
4 forecasts on the probable position of coal in Canada's
5 future energy picture.

6 Since 1948 the consumption of coal in Canada has
7 decreased. During this same period energy consumption in
8 Canada has risen by over 50% (1948 to 1957) and consequent-
9 ly coal as a percentage of total energy sources fell
10 in the decade from approximately 50% in 1948 to 25% in
11 1957. There have been further substantial reductions in
12 volume in 1958 and 1959.

13 In spite of this discouraging trend, students of
14 our overall energy picture conclude that coal will con-
15 tinue to play a major role as a source of energy in Canada.
16 This is stated in specific terms in the following extract
17 from a paper by C.L. O'Brian "Coal - A Source of Canadian
18 Energy".¹

19 "In summary, there is good reason to expect some
20 further decline in coal consumption in Canada over the
21 next two or three years, but at a reduced rate. There
22 will then follow a gradual increase to a total consumption
23 in 1965 of some 45,000,000 tons followed by a rapidly
24 accelerating growth to a conservative estimate in 1975 of
25 some 75,000,000 tons."

26 Another authoritative forecast, while not precisely
27 parallel, indicates the same general order of magnitude.
28 The following table from "Canadian Energy Prospects"
29

30 1. Paper presented at 20th Annual Joint Solid Fuels
Conference A.I.M.E. - C.I.M. - A.S.M.E., Quebec City,
October 10th, 1957.



contains an estimate of the total supply picture in 1965 and 1980 divided between Canadian production and imports:

Estimated coal supplies in Canada
(in millions of short tons)

	<u>1955</u>	<u>1965</u>	<u>1980</u>
Production	14.6	10.8	16.0 - 24.5
Imports	19.7	20.0	41.0 - 62.0
Exports	0.6	0.5	2.0 - 8.0
Supply	33.7	30.3	55.0 - 78.5

Source: Canadian Energy Prospects; John Davis, Page 97.

Although the hazards of economic forecasting generally and the additional limitations imposed by technical and other considerations in the energy field are acknowledged, nevertheless there is a substantial body of informed opinion to support a long term favourable outlook for coal. The forecast of energy consumption for the United States lends weight to this view.

Energy Consumption, By Source, 1955, and Estimated
1975

	<u>1955</u>	<u>1975</u>	<u>%change</u>
	<u>(1)</u>	<u>(2)</u>	<u>1955-75</u>
			<u>(3)</u>
Bituminous coal (million tons)	431	754	+ 74.9
Anthracite (million tons)	20	14	- 30.0
Oil and Natural Gas Liquids (Million Barrels)	3,034	5,923	+ 95.2
Natural Gas (billion C.Feet)	9,614	19,881	+106.8
Hydro power (billion kilowatt hours)	120	265	+120.8
Consumed as electricity (billion Killo. hours)	633	1,966	+210.6

Source: Energy in the American economy, 1850 - 1975
(forthcoming publication of Resources for the future, Inc.), Preliminary figures.

The rate of growth forecast for coal in the United States is in sharp contrast with the period since 1920



1 when bituminous coal experienced absolute declines in
2 tonnage. Over the same period, consumption of oil and
3 gas expanded rapidly. For the future, the rates of
4 growth forecast are not far apart for coal, oil and gas.

5 An important element in this picture in the United
6 States is the high rate of growth estimated for electric-
7 ity between 1955 and 1975, reflecting its ever-growing
8 use in industry and the home. This is estimated to
9 produce a substantial effect on coal, because much of the
10 power is expected to be generated from bituminous coal,
11 in the future just as it has in the past. The major
12 inroads of gas, and oil into coal's railroad and resid-
13 ential markets will no longer be large enough to offset
14 coal's expansion with the growth of electric generation.
15 This more optimistic forecast is tempered by the obser-
16 vation that if atomic energy were to cut seriously into
17 the use of coal for power after 1975 (it is not considered
18 probable before then) the pattern would change.

19 Likewise for Canada, the major element in the
20 expected increase in coal consumption is the production
21 of electricity from thermal sources. The opinion that
22 there will be a substantial increase in the use of coal
23 over the next twenty-five years, is based on anticipated
24 industrial requirements, including coke manufacture for
25 the iron and steel industry as well as thermal power.
26 Regarding competition from oil, liquid fuel requirements
27 of the internal combustion engine plus the demands for
28 oil for the remunerative domestic market will probably
29 reduce the availability of heavy fuel-oil; this trend is
30



1 already evident in United States refineries. Natural
2 gas, too, when supply and demand stabilize, is expected
3 to be in the position of a premium fuel. In the fore-
4 going paper,¹ the estimate of requirements for 1975 calls
5 for coal supply of 27,000,000 tons per year for power
6 generation in Ontario. The estimate for the Maritime
7 Provinces (not including Newfoundland) is for 3,750,000
8 tons of coal for power by 1975.

9 The above forecast of future sources of supply
10 for Canada's coal requirements assumes a substantial
11 volume of imports. As the principal consuming area will
12 be Ontario it is not expected that the whole market will
13 be supplied from mines in Eastern and Western Canada.

14 Canada should however, avoid dependence on foreign
15 coal. In case of war or other emergency, the national
16 interest calls for some control over such a vital factor
17 in our economy. This requires support for the maintenance
18 of coal production at a level that will assure supply of
19 at least a portion of the nation's needs: in short,
20 assistance to move Nova Scotia coal into Central Canada.
21 In this industry, particularly with underground mining,
22 continuity is essential and it is not possible to open and
23 close mines at will to meet short term fluctuations in
24 demand.

25 Another aspect of this matter, which has already
26 been dealt with at length is the potential effect of
27 decline in the coal industry on the economy of Nova
28 Scotia. There is general acceptance in Canada of the view
29 that it is in the national interest to encourage as wide a
30 distribution of industry as the natural resources of the country
will permit. It should be emphasized that closing



1 undepleted mines in Nova Scotia represents not only a
2 temporary suspension of operations but the permanent loss
3 of an important natural resource, as well as a large
4 portion of our labour force which could not be replaced.
5 Most of the coal comes from submarine mines and closure
6 is tantamount to abandonment.

7 The loss of coal resources in the mining areas of
8 Nova Scotia through closures must therefore be viewed
9 as a matter of grave concern. Besides the resource, there
10 is the dispersal of skilled personnel. There is the cap-
11 ital loss to the operator, and above all the large invest-
12 ment in social capital - schools, hospitals and other
13 municipal enterprises, in homes and other interests that
14 would be lost in areas largely dependent on this single
15 industry.

16 On the basis of long term energy trends, it
17 appears that Nova Scotia coal will have a vital role.
18 With respect, it is suggested that the industry should be
19 preserved until the more pressing temporary difficulties
20 have disappeared.

21
22 1. Coal - A source of Canadian energy, C.L. O'Brian

23 I will return to this presently, and I will skip
24 over the chapter with regard to electric power, although
25 I will come back to that before I sit down, if I may.

26 We give a general description of the general
27 power set up in the Province, and set forth the methods
28 of generation of power, and we show some estimates of
29 what is likely to develop in future. We point out on
30 page 55 according to the estimates for 1970 that we may



1 well use 1,600,000 tons for the development of electric
2 energy in this Province alone. We discussed the pros and
3 cons of hydro development. We mentioned the problem
4 raised by the possible cheapness of all in the develop-
5 ment of electric power, and I will come to that presently.

6 We go on to give some analysis of industry and
7 industrial development in this Province, and we point
8 out that most of our manufacturing is either resource
9 based now, or was historically resource based and while
10 we have some textile and manufacturing plants and others,
11 confectionery and so on, generally speaking market
12 oriented industries do not constitute a large proportion
13 of manufacturing in Nova Scotia.

14 The total electric power capacity in the Province
15 of Nova Scotia, as of November 30, 1959, amounted to
16 approximately 521,280 kilowatts, about 75% of which was
17 provided by thermal plants and 24% by hydro. Of the
18 four major generating companies in the Province, only one,
19 which supplies about 28% of the total capacity, is not
20 a privately owned utility.

21 A brief description is given below of these gener-
22 ating companies and the areas of the Province they service.

23 The Nova Scotia Light and Power Company Limited
24 has a total generating capacity of 220,595 kilowatts -
25 about 42% of the Provincial total. The total capability
26 of the hydro plants operated by this company is 38,095
27 kilowatts, while the similar figure for the thermal plant
28 in Halifax is 182,500.

29 The interconnected system of this company covers
30 the greater Halifax area, the area from Halifax through the



1 Annapolis Valley to Bear River, the Districts along the
2 south Shore from Halifax through Hubbards and Chester to
3 Indian Point near Mahone Bay; the Districts along the
4 Halifax to Truro road and in Northern Nova Scotia. Sub-
5 sidiary companies service Yarmouth and a part of Queens
6 County.

7 The Canada Electric Company at Amherst has a
8 thermal capability of some 26,750 Kilowatts and supplies
9 the area of Amherst, Parrsboro, Oxford and Collingwood.

10 Industrial Cape Breton is served by the Seaboard
11 Power Corporation Ltd., at Glace Bay, which has a thermal
12 capacity of 86,250 Kilowatts, about 17% of the Provincial
13 total capacity. This company generates the power supplied
14 to the immediate Sydney-Glace Bay area, and the surround-
15 ing towns of North Sydney, Sydney Mines, New Waterford
16 and Dominion.

17 Most of the remainder of the Province is served
18 by the Nova Scotia Power Commission, a Crown Corporation.
19 This includes the areas of Antigonish; certain areas of
20 Cape Breton, the western counties of Lunenburg, Queens,
21 Shelburne, Yarmouth, Digby and Kings, St. Margaret's
22 Bay and Sheet Harbbur and Pictou County. The Commission
23 is responsible for the adminstration of the Rural Electri-
24 fication Act.

25 The Nova Scotia Power Commission supplies a total
26 of 142,785 kilowatts, about 28% of the total power
27 capacity of the Province - 79,615 kilowatts by hydro
28 generation and 63,170 kilowatts by thermal generation.
29 A new hydro power development under way in Western Nova
30



1 Scotia will provide 25,000 kilowatts of additional cap-
2 acity.

3 The retail distribution of electric power in many
4 urban centres is in the hands of local utilities, about
5 twenty in all, which buy from those major generating
6 companies.

7 The Nova Scotia Power Commission and Nova Scotia
8 Light and Power Company Limited are participating with
9 the New Brunswick Electric Power Commission in the Inter-
10 provincial Grid which will be completed this year. The
11 main link of the grid, which will tie together a total
12 generating capacity of over half a million kilowatts in
13 Nova Scotia and New Brunswick, will be a 138,000 volt
14 line carried on giant steel towers between Moncton and
15 Halifax (Tufts Cove) with control centre at Truro. A
16 committee comprising one representative from each utility
17 will be responsible for operation, maintenance, etc.

18 Financial advantages derive from pooling reserves
19 and making possible the use of generators of more effie-
20 cient size. Added to this is strengthened service contin-
21 uity, making possible more effective use of power resources
22 in Nova Scotia and New Brunswick.

23 The relative lack of hydro power resources is
24 apparent in the analysis of generating capacity showing
25 over three-quarters of the current installations in
26 thermal plants. In pursuing the objective of service
27 at the most economic rates attainable, it has been the
28 tradition in Nova Scotia, generally speaking, to develop
29 the available hydro power as these conditions were met.
30



1 Apart from the Sissiboo development which is under-
2 way, the only remaining substantial source of hydro power
3 in Nova Scotia is at Wreck Cove in Cape Breton. Survey
4 work for this project has been completed, but no decision
5 has been made as to the date of commencement.

6 The accompanying table projecting electric power
7 consumption to 1970 is based on the premise that this
8 general policy will be continued. Potential hydro
9 installations are taken into account in arriving at an
10 estimate of the supply and represent the practical limits
11 of hydro development as now assessed. Actually no dec-
12 ision has been made to proceed with the Wreck Cove
13 development.

14 The consumption of electricity from thermal sources
15 estimated for 1970 is 2,475 million kilowatt hours. The
16 equivalent tonnage of coal (if only coal were used) of
17 11,000 B.T.U. per lb. would be approximately 1,600,000
18 tons.

19 The primary objective of electric power development
20 is the generation and distribution of electricity in the
21 most efficient way so that the consumers get maximum value
22 for their money. In addition, power generation provides
23 a market for coal which is not unimportant now but has
24 even more significance for the future. However it must
25 be acknowledged that the costs of Nova Scotia coal are
26 such that it cannot compete at existing price levels
27 with imported fuel, if price is the only consideration
28 (American coal and residual oil).

29 Because of the significance of power costs in
30



1 industrial development and in view of the shrinking
2 markets for Nova Scotia coal the Government of Canada
3 established a subvention program in 1957. The purpose
4 was to make Nova Scotia coal sold to utilities here
5 competitive with United States coal sold for power
6 generation in Ontario. A subvention of 7.43 cents per
7 million B.T.U.'s on all coal used for the generation of
8 electricity in Nova Scotia is paid to the Government of
9 the Province and redistributed through the utilities.
10 Only industrial users of power receive the benefit of
11 the subsidy.

12 The effect is to reduce substantially the cost of
13 industrial power when generated from Nova Scotia coal.
14 Coal may cost more than oil to burn, but with the subsidy
15 program industrial users of power in Nova Scotia are not
16 injured. The subsidy program provides protection for
17 our coal without an adverse effect on competitive indus-
18 try.

19 Reference has already been made to the Inter-
20 provincial Grid for which federal capital assistance is
21 available. This grid and loans for construction of gen-
22 erating plants were designed to help reduce the
23 cost of power and thus encourage industrial development.
24 This aspect of the power program could benefit coal in-
25 directly if increases in consumption ensued.

26 Because residual oil is cheaper than our coal at
27 seaboard, utilities will wish to burn it in order to
28 provide the cheapest power for domestic and commercial
29 customers. The federal subsidy on coal keeps down the
30



1 cost of power to industry. The question arises as to
2 whether the general public is prepared to forgo the
3 savings from oil-generated power in order to help coal.
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TOTAL POWER GENERATION IN NOVA SCOTIA

000 KW HR.

Actual Kw Hr. Growth 1949 - 1959**

1949	376,386	322,869	699,255
1950	364,888	367,681	732,569
1951	423,553	392,268	815,821
1952	477,830	441,872	919,702
1953	448,889	548,968	997,857
1954	526,268	545,623	1,071,891
1955	544,995	607,991	1,152,986
1956	516,685	729,438	1,246,123
1957	548,944	852,128	1,401,072
1958	604,404	1,017,989	1,622,393
1959	624,353	975,434	1,599,787

Projected KW Hr. Growth 1960 - 1970

1960	635,000	1,035,000	1,670,000
1961	635,000	1,190,000	1,825,000
1962	635,000	1,325,000	1,960,000
1963	745,000	1,360,000	2,105,000
1964	815,000	1,445,000	2,260,000
1965	865,000	1,565,000	2,430,000
1966	990,000	1,625,000	2,615,000
1967	1,015,000	1,795,000	2,810,000
1968	1,015,000	2,005,000	3,020,000
1969	1,015,000	2,230,000	3,245,000
1970	1,015,000	2,475,000	3,490,000

* This table is based on the assumption that the following hydro installations will come about. All additional requirements will be made up by thermal.

1963 - LeQuelle, Alpina, Riverdale
1964 - Wreck Cove (Gisbourne)
1965 - Wreck Cove (Cheticamp)
1966 - Wreck Cove (Beaver)
1967 - Sissiboo (4th. Grand)

** 12 Month Periods June 1 - May 31



1 Reference has been made to the relative importance
2 of the various industries in Nova Scotia's economy and it
3 was pointed out that manufacturing is the leading commod-
4 ity producing industry both in terms of employment and
5 value of production. The statistics showed also that
6 the rate of growth of manufacturing in the past few
7 decades exceeded that in the primary industries.

8 It should be noted that the pattern has been uneven:
9 employment in manufacturing reached a wartime peak of
10 37,812 in 1944 (with 8,912 in shipbuilding compared with
11 2,753 in 1957) and a post-war high of 33,371 during
12 the Korean build-up. The number employed in the nineteen-
13 thirties never exceeded 18,100 compared with employment
14 of 31,764 in 1957 (the latest figures available).

15 Notwithstanding this development of manufacturing,
16 the primary industries (mining, fishing, forestry) are
17 still more important in Nova Scotia's employment and
18 production picture than in the Canadian economy. It is
19 also significant that primary manufacturing represents
20 a greater proportion than "secondary" industries in the
21 total picture.¹

22 The leading manufacturing industries are with a
23 few exceptions, resource-based with export markets taking
24 up a large share of production. (See table attached.)
25 In this category are fish processing, pulp and paper and
26 saw mills. The presence of coal and access by water to
27 iron ore from Newfoundland led to the production of
28 primary iron and steel in Sydney serving export and
29 national markets. Coal was important also in the develop-
30 ment of steel fabricating plants in Pictou and Cumberland



Counties.

There are of course historical situations where the resource factor has disappeared or diminished in importance as in shipbuilding. In this and other leading industries such as aircraft production and repair, defence expenditure has been an important element.

It is true that some textile and apparel products, for example, find important markets across the nation. Industries such as these and confectionery, using imported raw materials, also derive some advantage from a coastal location. Generally speaking, however, market-oriented industries, especially where economies of scale are significant, do not constitute a large proportion of manufacturing in Nova Scotia.

1. Source: Canadian Secondary Manufacturing Industry
D.H. Fullerton and H.A. Hampson.

This represents a vulnerable situation within the category of manufacturing. With a preponderance of heavy industry, more than ordinary seasonality in employment, and susceptibility to changes in business conditions, it is self-evident why strenuous efforts should be made to diversify the economy. The pursuit of this objective is in no way a substitute for programs designed to encourage growth and improvement in the primary industries. However, the following paragraphs will deal with the Province's industrial development activities in relation to manufacturing.

The Nova Scotia Department of Trade and Industry was established in 1941 and in the early years concerned itself mainly with problems relating to wartime production



1 and supply. This Department now offers business and
2 technical information services to established industry
3 in Nova Scotia. In so doing, it makes use initially of
4 its own facilities but supplements these by close liaison
5 with other public agencies in related fields. In par-
6 ticular, close co-operation is maintained with the
7 Technical Information Service of the National Research
8 Council provided in Nova Scotia through the Nova Scotia
9 Research Foundation. Finally, private consultants are
10 retained where circumstances warrent. (The information
11 service includes publication of a Nova Scotia Directory
12 of Manufacturers and other information booklets.)

13 Facilities are available in response to enquiries
14 that arise from within the Province or elsewhere. In
15 addition, the Department has initiated a number of
16 investigations for the purpose of finding and defining
17 in specific terms industrial opportunities that are not
18 now being exploited. This program was undertaken to
19 assist established industries to find new products or
20 lines where feasible; it was also hoped to uncover
21 opportunities for altogether new establishments. The
22 purpose is to provide a factual basis for promotion and
23 to interest business groups here and farther afield in
24 industrial development in Nova Scotia.

25 Special attention is given to fisheries. Financial
26 assistance for the acquisition of boats and equipment
27 has been available since 1936 and under the existing
28 Fishermen's Loan Act since 1944. At the same time train-
29 ing in some of the elementary skills of the trade are
30



1 provided. The objective is to increase the productivity
2 of the individual and thus enable him to improve his
3 earning power. Fish processing, as a manufacturing
4 operation, qualifies for loans under the Industrial Loan
5 Act and the Fisheries Division of the Department of
6 Trade and Industry gives particular attention to inshore
7 fishermen and the development of shore facilities in
8 the smaller fishing communities.

9 The Province provides financial assistance to new
10 and established manufacturing firms. The Industrial
11 Development Act gives the Government very broad powers
12 to assist industry but the authority under this statute
13 is used only in unusual circumstances. Generally speak-
14 ing, financial assistance is provided under the Industrial
15 Loan Act administered by the Department of Trade and
16 Industry or by Industrial Estates Limited.

17 The Industrial Loan Act.

18 This Act is administered with the advice of an
19 Industrial Loan Board, made up of seven representative
20 business men who meet several times a month to deal with
21 loan applications. Approval of the Government is required
22 before a loan is made.

23 Briefly, the requirements are that the applicant
24 provide at least fifty per cent of the capital needed,
25 that the funds be used for building a new plant or
26 expansion of an existing one, and that the project be
27 commercially sound in the opinion of the Board. Loans
28 are made only for the acquisition of fixed assets such as
29 land, buildings or equipment and when the funds cannot be
30



1 obtained from other sources on reasonable terms.

2 Since the inception of the lending program (early
3 legislation was replaced by the present Industrial Loan
4 Act), from 1944 to March 31, 1959, \$4.5 millions were
5 loaned for industrial projects. In 1958, the average
6 employment for the year was approximately 1,200 in firms
7 that had been established in the fifteen year period with
8 the aid of a provincial loan. Employment in firms that
9 had loans for expansion was nearly 600.

10 Industrial Estates Limited.

11 In September 1957, Industrial Estates Limited was
12 set up as a Crown Corporation to promote the development
13 and expansion of light industry in Nova Scotia. This
14 Company is financed by the Province but is operated as
15 an autonomous agency within the limits imposed by Statute
16 and its agreement with the Government. Policy is deter-
17 mined by 10 Directors, men who are prominent in various
18 walks of business life in Nova Scotia and the Minister of
19 Trade and Industry, the Government representative on the
20 Board.

21 Its basic means of promotion is the provision of
22 a plant for lease or rental on favourable terms. This
23 includes construction and financing of the building, and
24 Industrial Estates Limited may loan money on equipment.
25 It is also empowered to make special tax arrangements
26 with towns and municipalities.

27 The promotion of heavy industry based on research
28 is left with the Department of Trade and Industry. The
29 industrial estates technique was considered more effective
30



1 for the promotion of light or secondary industry.

2 After two years of operation, Industrial Estates
3 Limited has financed the construction of five new plants,
4 and an extension for a sixth. It has provided financial
5 assistance to two other firms (Federal Products Ltd.,
6 Truro and Stewiacke, and Bonda Meal and Oil Limited,
7 Short Beach, Yarmouth County). New plants are being
8 constructed for Surrette Battery Co. Ltd., at Springhill,
9 Phillips Electrical Co. Ltd., at Woodside, and Angel
10 Manufacturing and Supply Co. Ltd., North Sydney. Negot-
11 iations are underway with a number of other firms.
12 Springhill Development Corporation Limited.

13 Two of the projects referred to above - Springhill
14 Wood Products Ltd., and Surrette Battery Co. Ltd., were
15 set up through Springhill Development Corporation Limited.
16 This Company, operated as a subsidiary of Industrial
17 Estates Ltd., was incorporated to spearhead special
18 efforts to attract industry to Springhill after the
19 second disastrous mining accident in 1958. A fund of
20 one million dollars has been made available for this
21 purpose with the object of offering special inducements
22 to firms locating in Springhill, over and above those
23 provided by Industrial Estates Limited.

24 In spite of these special provisions, only two
25 new industries have been established in Springhill to
26 date. Admittedly, one factor is that Springhill is
27 not on the main line of the Canadian National Railways.
28 This means added freight charges plus a different standard
29 of time and service. (Indeed an appeal for withdrawal of
30



the branch line service provided by Cumberland Railway and Coal Company Limited is now before the Board of Transport Commissioners.) Moreover, successive provincial governments have made little progress in placing secondary manufacturing industries in the coal towns of Cape Breton.

Assistance of Coal Industry By Government Of

Nova Scotia

Provincial expenditure on the coal industry up to and including 1959 may be summarized as follows:

Departmental expenditures	\$ 9,808,485.25
Royalty remissions	484,737.03
Royalty refunds (iron)	353,847.10
Assistance and investigations	6,304,323.40
Inverness operations ¹	<u>3,933,648.34</u>

Total (to end of 1959) \$20,885,041.12

Royalty revenues total \$39,982,949.71. This review shows, therefore, that the Province has spent more than 52% of its total revenue from coal on problems relating to coal mining or the coal industry.

A chronological statement of revenue and expenditures since the beginning of 1945 and exclusive of Inverness mine is given in the table attached.²

1. The Province first took responsibility for Inverness operations in 1925 with an expenditure of \$13,479.07. From that date up to and including 1952, it expended \$3,514,333.26 on operating costs and \$419,351.08 on capital or a total of \$3,933,648.34.
2. For detail prior to November 1944, reference should be made to the Submission on the Coal Resources and



Coal Industry of Nova Scotia presented to the
Royal Commission on the Coal Industry of Canada,
1945.

In the past three years (1957, 1958, 1959)

Provincial assistance has totalled \$1,768,970.09. The following table shows how this sum has been expended.

1.	Subsidies to Inverness County Coal re power	\$ 16,042.64
2.	Departmental costs re taking over of Port Hood mine (maintenance)	40,603.00
3.	Assistance to Pictou County Mines (Greenwood and Drummond Coal Co.	24,834.14
4.	Springhill Disasters - grants	75,000.00
	- investigations	37,026.28
	- drilling	55,844.81
5.	Drilling at Debert (exploratory)	3,094.94
6.	Assistance re movement of coal. ¹	\$500,000.00
7.	Costs incurred in banking of coal by DOSCO (1958)	100,000.00
8.	Relief to miners (includes one item approximated at \$30,000.00)	123,713.00
9.	Loans to independent operators ²	305,000.00
10.	Payment of bank guarantees, etc. on behalf of operating companies ³	451,036.28
11.	Coal carbonization 1951 - 1957	<u>36,775.00</u>
		<u>\$ 1,768,970.09</u>

1 Represents the Province's share of increased subventions payable on the movement of Nova Scotia coal. Agreed maximum of \$500,000 voted for 1959; payments to date \$149,930.76. Estimates for 1960 - 1961 will include further \$500,000.00.

2 \$150,000 authorized for 1960.



3 Accumulation of guaranteed obligations over ten-year
period , written off in 1958 - 1959; Cumberland Fuel
and Trading Company Ltd., Margaree Steamships Ltd.,
Inverness Industries Ltd.,



DEPARTMENT OF MINES

Year	Gross Ton Sales	Royalty Revenue	Departmental Expenditure	Assistance and Investigations	Royalty Remitted	Remarks
		\$	\$	\$	\$	
1945	4,172,160	551,530	194,996			Campbell Mine Limited Loan
1946	4,366,364	564,199	258,528			Colchester Coal Mines Limited
1947	3,196,018	423,104	327,798			Dominion Coal Company (Old Dispute)
1948	5,436,141	705,663	325,568	17,000.00		Standard Coal Company Limited
1949	5,145,610	713,187	378,454	52,123.29	21,140.14	
1950	5,421,916	16 months	16 months	3,124.86		Inverness Coal Mine Operations 1925 to 1951
1951	5,211,243	879,755	579,847	3,935,648.34 100,000.00		
1952	4,897,114	638,062	440,844	4,285.00 41,853.62 1,000.00		County Coal Operations Underground Gassification of Coal Hugh Beaton Mine Macgregor Mine Disaster Fund Riverside Mine
1953	4,759,911	604,875	454,974	25,383.56 500.00		S.J. Doucet & Sons (Machine)
1954	4,862,916	594,320	417,359	23,000.00		Inverness Coal Mine Direct Compensation
1955	5,002,083	608,617	558,169	96,593.84		Drummond Coal Company Limited
1956	4,982,596	648,472	411,263	1,000.00 14,185.00		Malcolm Beaton Inverness Advertising Coal Sales
1957	4,708,871	611,759	403,053	50,000.00	5,963.73	Loah - Atlantic Coal Company Limited Greenwood Coal Company Limited
				25,000.00 17,428.52		Relief Springhill Mine Disaster 1956
				36,775.00		Investigation 1956 Springhill Disaster
				13,500.00		Coal Carbonization 1951 - 1957
				44,666.48		Glace Bay Mines Assistance 1954 - 1957
				164,985.99		Inverness Industries Limited
1958	4,170,463	545,580	431,261	50,000.00		Margaree Steamships Company Limited
				19,597.76		Relief Springhill Mine Disaster 1958
				2,882.20		Investigation Springhill Disaster 1958
				142.84		Subsidy Campbell Mines Limited
						Subsidy S. J. Doucet & Sons Limited

Inverness Coal Mine Equipment loaned to Inverness



DEPARTMENT OF MINES (Continued)

Year	Gross Ton Sales	Royalty Revenue	Departmental Expenditure	Assistance and Investigations	Royalty Remitted	Remarks
1959					1,625.36	Subsidy Evans Coal Mine Limited Subsidy Inverness Industries Limited Greenwood Coal Company Limited Greenwood Coal Company Limited Drilling Subsidy Campbell Mines Limited Subsidy S. J. Doucet & Sons Limited Subsidy Evans Coal Company Limited Subsidy Greenwood Coal Company Limited Drilling Debert Loan - Chestico Coal Company Loan - S. J. Doucet & Sons Limited Maintaining Port Hood Mine Drilling Springhill Movement of Dosco Coal Bank * Additional Costs re movement Dosco Coal Bank Loans - Cumberland Fuel & Trading Co. Ltd. 1949 - 1959 Relief to miners

66,333,406 8,617,587 5,711,590.95 28,729.23

* \$ 500,000 authorized for 1959 - 1960



1 The economic importance of the coal industry to
2 Nova Scotia has been amply demonstrated in this submission
3 as in other reports and documents. Generally speaking,
4 the role of the Provincial Government has been to assist
5 the smaller independent operators, while the federal
6 Government assisted the movement of coal to subvention
7 markets. The Province has however agreed to pay a prop-
8 ortion of the increase in costs when Federal subventions
9 were raised to meet an emergency in April, 1959 (up to
10 \$500,000 in 1959, and up to \$500,000 in 1960). Also
11 \$100,000 was allocated for payment to Dosco to cover a
12 portion of the carrying charges on the unusually large
13 stockpile of coal in 1958.

14 Federal policy has been an important factor in the
15 marketing of Nova Scotia coal beginning with tariffs as
16 a part of the National Policy. These were not designed
17 specifically to assist in the development of the coal
18 industry but such special measures include transportation
19 subventions, capital assistance for the construction of
20 coke plants, the coke bounty, capital assistance for
21 mechanization of coal mines and for power installations.

22 While subventions are costly, it is submitted that
23 they are justified. In the event of war complete depend-
24 ence on foreign fuel would place the nation in an extreme-
25 ly vulnerable position. In fact, it was this aspect
26 of the Canadian fuel situation that first led to the
27 setting up of the Dominion Fuel Board in 1922. The
28 question is rather how and to what extent, not whether
29 assistance should be given.
30



1 In the difficult task of determining what measures
2 "can reasonably be adopted by Governments to support the
3 economic production, distribution and sale of Canadian
4 coal" the Commission must bear in mind not only the
5 present national fuel and energy picture but future
6 demand. "The Canadian energy picture has been shaped by
7 geography and, as in many other National problems, this
8 geographical condition has forced us into undertakings
9 which while economically expensive, have been accepted
10 as in the National interest."¹

11 Further in the development of the nation the
12 economy of the region both present and future must surely
13 be regarded as a more than local significance. Central
14 Canada was developed by tariffs which amounted and still
15 amount to colossal subsidies. The nation ought not to
16 shrink from the relatively small subsidy necessary to
17 revitalize and maintain the coal areas of Nova Scotia.

18 Recommendations:

19 This Submission does not purport to provide an
20 answer to the whole problem of coal. Questions requiring
21 answers and areas that warrant investigation have been
22 indicated. While the complexity of the problem is
23 recognized, some specific recommendations are advanced.

24 ¹ Coal - A Source of Canadian Energy - C.L. O'Brian.

25 Transportation subventions

26 Reference has been made to the high cost of Nova
27 Scotia coal and it is recognized that while subventions
28 have been applied to the transportation factor the basic
29 problem lies in the cost of production compared with
30



1 United States coal or other competing fuels. Even so,
2 it should be clear, as was recognized in the Report of
3 the Royal Commission on Coal (Carroll), that transportation
4 subventions will continue to be necessary to assure reg-
5 ular production and employment at a reasonable level
6 and that they are warranted in the light of all the
7 circumstances. If necessary these should be maintained
8 at a high level until alternative policies become effect-
9 ive.

10 In addition, it is contended that greater flex-
11 ibility is desirable. The subvention policy was developed
12 in relation to United States coal but now other forms of
13 imported energy are a serious threat to the coal industry.
14 In the light of this the basis of subvention payments
15 should be reviewed. Any extension of the program should
16 provide assurance of incentive to keep costs down.

17 Financing Capital Requirements

18 Reference has been made to the improvement that
19 has been brought about in production per man-day as a
20 result of mechanization of the mines. As the full
21 benefits of this program have not yet been realized, it
22 is essential that those undertakings not yet completed
23 be pushed forward.

24 A broad development program involves not only
25 modernization of existing workings but the rationaliza-
26 tion of the industry, involving the orderly development
27 of new pits as old ones may have to be replaced. The
28 financing of development has been supported by loans
29 from the Government of Canada since the enactment of the
30



1 Maritime Coal Production Assistance Act in 1949. The
2 funds authorized by that Act have been virtually
3 exhausted and it is urged that the Commission give con-
4 sideration to the need for additional funds in the light
5 of the development plans of individual companies concern-
6 ed.

7 It is perhaps appropriate to refer here to the
8 application by Dominion Coal Company Limited for a loan
9 to construct a wash plant. In view of the increasing
10 need for adequate preparation of coal for market it is
11 urged that consideration be given to provision for
12 financial assistance for such a project. This may require
13 amendment of the above statute apart from an increase in
14 the amount of funds available for loan.

15 Mining Costs

16 Of the many factors that affect the cost of mining
17 coal, some can be controlled and others cannot. Although
18 the limitations imposed by the nature of the deposits must
19 be accepted, there may be room for improvement in mining
20 operations in Nova Scotia. It is respectfully suggested
21 that these should be carefully examined in view of their
22 grave importance. The possibility of cost reduction
23 through new openings should be included in this examin-
24 ation.

25 "A major factor in the Nova Scotia coal problem
26 is not the cost of transportation but the high cost of
27 production, administration, distribution, and other
28 expenses."¹

29 1. Dominion Coal Board Annual Report, 1958-1959, page 16
30



1 It is essential that an examination be made not
2 only of the mining costs but also of the marketing of
3 Nova Scotia coal. It is recognized that there are
4 technical and business problems much beyond the ordinary.
5 The Dominion Coal Board has given effective help to the
6 industry in extending the market area and it is recommend-
7 ed that close liaison between the industry and the
8 Dominion Coal Board be maintained and co-operation be
9 strengthened. This of course should not diminish the
10 initiative in and responsibility for sales promotion
11 exercised by the firms themselves.

12 There has been much controversy concerning the
13 marketing of Nova Scotia coal within the Atlantic
14 Provinces. It would be beneficial to all concerned to
15 have the situation clarified. If improvements can be
16 made, tangible advantages will accrue. The very least
17 that would be accomplished would be to dispel the doubts
18 and questions that have been voiced concerning the
19 effectiveness of the distribution setup in our own market.

20 St. Lawrence Seaway

21 Concern has been expressed about the possible
22 effects of the St. Lawrence Seaway on the marketing of
23 Nova Scotia coal. It will be some time before new
24 patterns of trade will crystallize but any steps that
25 can be taken to turn developments to the advantage of
26 Nova Scotia coal should not be neglected. The attention
27 of the Commission is drawn to the disquieting fact of
28 "the absence of unloading facilities anywhere on the
29 Canadian side of Lake Erie and Lake Ontario for the type
30



1 of ship normally used in the past for the Sydney-to-
2 Montreal movement of coal. In the early stages of the
3 Seaway's operation, at least, upstream movement of
4 Canadian coal would have to be by transfer of cargo to
5 self-unloaders at Montreal."¹ It is respectfully
6 suggested that the Commission investigate ways and means
7 of providing for direct shipment via self-unloading
8 vessels.

9 A study of the effects of the Seaway on the
10 economy of the Atlantic Region has been commissioned by
11 the Maritimes Transportation Commission.

12 Research

13 The importance of taking full advantage of coal
14 for use other than as fuel is so obvious as to need no
15 elaboration here. The industry should of course keep in
16 touch with developments in other parts of the world. In
17 addition there is room for research in Canada. Indeed
18 this research should not be limited to new uses for coal
19 but should include investigation and development of new
20 methods of mining and distributing coal. In view of
21 the limited financial resources of the coal industry and
22 the high cost of both basic and applied research, it
23 may well be difficult for the companies to finance an
24 adequate research program. The Government of Canada
25 should therefore be justified in providing for more
26 attention to this field than in most other industries.
27 It is recommended that generous support be given to
28 research in the coal industry.

29 ¹Dominion Coal Board Annual Report 1958-1959, page 16
30



1 Inducements to Other Industries

2 The need for additonal job opportunities in the
3 traditional coal mining areas of Nova Scotia makes clear
4 the importance of encouraging manufacturing in order to
5 provide employment and diversification. Possibilities for
6 successful attraction of light industry will vary from
7 area to area but certainly some of the affected counties
8 seem well adapted to such development if additional
9 incentives can be provided.

10 Expansion of the steel industry in Sydney should
11 be the settled policy of all levels of government.
12 Further assistance in transportation may well be
13 required and special consideration by all taxing author-
14 ities is recommended.

15 In considering the encouragement of manufacturing
16 in the coal mining counties reduced transportation costs
17 would be an important factor, but these are already under
18 consideration by a Royal Commission. Transportation
19 costs should not be the only concern, however. Cost of
20 same is only one of the disadvantages of location. It
21 is recommended therefore, that new industry or additions
22 to existing industry receive special tax concessions by
23 the Federal Government.

24 I come now to some general considerations. I am
25 supplying the Commission with a copy of any remarks I
26 make now which are not in the submission.

27 The first point I wish to emphasize is that
28 coal has a good future provided its price is competitive.
29 Coal mining is not a dying industry. To confirm such a
30



1 statement one has only to refer to carefully considered
2 estimates of the development of thermal power during the
3 next ten years. In Nova Scotia alone, even if there is
4 some further development of hydro power, as, for example
5 at Wreck Cove, it is forecast that by 1970 1,600,000 tons
6 of coal would be required each year to develop the
7 necessary thermal power. The anticipated growth in
8 coal required by Ontario Hydro is set forth on page 51
9 of the brief. We understand further that there is a
10 distinct possibility of developments in thermal power
11 even in the Province of Quebec before too long.

12 Thermal power requirements alone would therefore
13 seem to ensure a good opportunity for coal in the future.

14 Much of the markets which coal has lost in recent
15 years has been lost because of technological change and
16 not merely because of price. It would appear that rail-
17 ways would have turned to oil even if coal had been one-
18 half the price, because of the economy the railways
19 considered to be involved in diesel operation.
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21
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1 A few years ago, as I said, the railways offered
2 a market of one million tons a year of Nova Scotia coal.
3 Today that market is virtually non-existent. Many
4 householders turned to oil rather than coal, not primarily
5 because of price but in spite of price differential
6 rather because of convenience, cleanliness, and if I may
7 say, the service offered to the customer.

8 With regard to thermal power development, however,
9 coal appears to suffer no technological disadvantage as
10 compared with other fuels; nothing substantial at least.
11 The future, therefore, is not necessarily gloomy at all.

12 It may well be that the worst is behind us, and
13 any future technological changes will not hurt coal as
14 has been the case during the last number of years. On
15 the other hand, thermal power development will afford
16 a steadily expanding market for coal.

17 As I said earlier, if we still had the railway
18 market for our coal today, our market would not be
19 substantially below the level of ten years ago. The
20 table that I have mentioned constitutes page 5 of the
21 Submission and shows that the market for coal in this
22 Province, that is the Province of Nova Scotia is not
23 significantly different in total than it was ten years ago.

24 As I pointed out earlier, the table also shows
25 that sales to other provinces during the year 1959 were
26 not substantially different in total than ten years ago,
27 although admittedly some of those sales are vulnerable and
28 are made possible only by increased subventions. I say
29 again, I suggest again that the future of coal looks
30



1 bright if the price is competitive.

2 It is therefore of the utmost importance that
3 every effort be made to ensure that coal is able to
4 compete in these expanding markets which are foreseen
5 during the next few years.

6 We have attempted to show that coal is a very
7 important factor in the economy of this Province, and is
8 not just another industry. It is clear from the printed
9 Submission that the growth of the gross National Product
10 of Nova Scotia from the end of the war until the end of
11 1957 was only 15% in terms of constant dollars, as against
12 the far larger growth for the Nation as a whole.

13 This relatively small expansion in the economy
14 of Nova Scotia since the war must be regarded as, I
15 suggest, a part of the setting in which the present
16 difficulties in the coal industry must be viewed.

17 We have attempted to show how vital the coal
18 industry is to the coal mining communities and the coal
19 mining counties. Over 90% of the coal now being mined
20 is mined in the County of Cape Breton. The submission
21 will show, I think, how dependent on the coal industry
22 are towns such as Glace Bay, Dominion, New Waterford,
23 Sydney Mines, and the countryside surrounding these
24 towns, and it will show how much these communities have
25 already been affected by the decline in employment in
26 the coal mines in recent years, and how much the Counties
27 of Inverness, Pictou and Cumberland have been affected
28 in the past by the closing of the coal mines.

29 The closing of a mine is clearly a disaster for
30



1 any community, and especially so if alternative employ-
2 ment is not made available. At the very best, it is
3 very difficult for older men from the mines to turn to
4 other occupations and we have admitted that successive
5 Provincial Governments have had little success in placing
6 new industries in coal mining towns.

7 For these reasons, it is of the very greatest
8 importance that every effort be made to maintain our
9 coal mines and to ensure that our mines can compete, if
10 that can so be ensured in any possible way.

11 The Government has recommended a number of things,
12 in the final chapter in the submission. With regard to
13 subventions, we have two rather explicit recommendations:
14 We have recommended that coal mining operations in the
15 Province be carefully examined in order to see whether
16 the cost can be reduced.

17 We suggest a number of things with regard to
18 subventions and we assume that even if costs can be
19 reduced, assistance in transportation will be required,
20 and we suggest too that they should certainly continue
21 at a sufficient level to ensure regular production and
22 employment at a reasonable level, and they are certainly
23 warranted in the light of all the circumstances.

24 If necessary, these subventions should be maint-
25 ained at a higher level until an alternative policy could
26 become effective.

27 We suggest there might be greater flexibility in
28 the subventions. We point out that the subvention was
29 developed in relation to the United States coal but that
30



1 now there are imported forms of energy, together with new
2 competition within our own country, but certainly
3 imported forms of energy and suggestions have been made
4 that the Province of Nova Scotia relate the difference
5 in taxes on residual oils.

6 We suggest that any extension of the subvention
7 program should provide some assurance of an incentive
8 to keep costs down, although that may be a difficult
9 matter to work out.

10 We go on to suggest, and recommend, that adequate
11 arrangements be provided to meet the capital requirements
12 of the industry. A broad development program, we point
13 out, involves not only the modernization of existing
14 workings, but involves the rationalization of the industry
15 as a whole, and particularly the orderly development of
16 new pits as old ones have to be replaced, and point out
17 that under existing legislation financial assistance is
18 perhaps no longer adequate for this purpose and we hope
19 the Commission will consider that carefully.

20 With regard to mining costs, we point out that
21 some can be controlled and some cannot and we respect-
22 fully suggest that the manner in which mining operations
23 are conducted should be carefully examined in view of
24 their great importance, with a view to seeing what
25 possibilities there are for cost reduction, and we
26 emphasize the importance of the possibility and the
27 feasibility of new openings being considered.

28 A report by the Dominion Coal Board is that
29 "A major factor in Nova Scotia coal problem is not the
30



1 cost of transportation but the high cost of production,
2 administration, distribution and other expenses." so
3 we suggest that it is essential not only that there be
4 careful examination of mining costs, but also of the
5 methods of marketing Nova Scotia coal.

6 Here again, we recognize that there are problems
7 involving unusual difficulties. The Dominion Coal Board
8 has given very effective help to the industry in its
9 marketing operations. I would like to say how grateful
10 the members of The Government of this Province are to
11 the assistance that Mr. Uren has given in this connection
12 to the problem of the coal industry.

13 Suggestions have been made that the Coal Board
14 should be made a marketing agency for the Nova Scotia
15 coal. We are not prepared to agree necessarily that that
16 would be helpful. We do emphasize here the importance
17 of close liaison between the Dominion Coal Board and
18 the sales force of the industry.

19 My observation is that liaison has been very close,
20 during recent years at least, and perhaps before that.
21 I would hope that that would continue. If it does, I
22 am sure the Coal Board can be of greatest assistance in
23 the marketing of our coal.

24 There has been a good deal of controversy, as the
25 submission mentioned, concerning the marketing of
26 Nova Scotia coal within the Atlantic provinces, and
27 particularly within Nova Scotia, and it would be bene-
28 ficial to all concerned if the Commission could clarify
29 this situation because if improvements can be made then
30



benefits would recur, will rebound to everyone, and the very least, many doubts and questions will be dispelled.

We go on to call attention to the St. Lawrence Seaway. The Maritime Commission has a Commission of Inquiry of its own. We call attention particularly to the part of the Dominion Coal Board's Annual Report where mention is made of the absence of unloading facilities anywhere on the Canadian side of Lakes Erie and Ontario, for the type of ship normally used in the past in the Sydney to Montreal movement of coal.

In the early stages of the seaway at least the upstream movement of the Canadian coal has to be by transfer of coal to self unloaders at Montreal.

We respectfully suggest this subject would require investigation.

We point out the importance of research not only in the field of mining but in the field of marketing as well. We point out that in the financial condition that the industry finds itself in, and the admitted difficulty in passing adequate research policy, we recommend that generous support be given to research in the coal industry. All these recommendations relate to coal.

As I say, the Government has recommended in particular that mine operations in the Province be carefully examined to see whether costs can be reduced, and again I draw particular attention to the possibilities of cost reduction through new openings.

I would like to say a word about that. I think it is the view of Nova Scotia generally that if one or more of the existing mines in this Province are larger



1 cost mines from the others, then certainly a complete
2 study should be made of the possibility of new openings
3 to offset any closing. That view has been very forcibly
4 put forward by the leaders of the United Mine Workers of
5 America, and also by the leader of the opposition in the
6 Legislature a few days ago, and I think it represents
7 the solid public opinion in this Province that it is a
8 capital requirement. The development of new low cost
9 pits may well be a problem for the coal companies because
10 I have heard some very large figures mentioned in
11 connection with such a pit. Very large figures mentioned
12 as to what it would cost to develop a modern, low cost
13 coal mine.

14 It is to be hoped that lack of capital would not
15 impede development, and it is for this reason that we
16 have laid particular emphasis in the submission on the
17 importance of coal requirements being adequately financed.
18 I know it may be said something like this; While true
19 the market for coal will expand in the future, and it
20 may become economically feasible in the future to develop
21 some new low cost pits, but this development is some
22 years away, and in the meantime it may be said that the
23 only course is to close down one or more of the larger
24 cost pits to enable the rest of the mines to continue
25 operating on a sound basis.

26 We urge that subventions be maintained at a high
27 level in order to preserve our mines through these
28 difficult years; in order to make possible - I emphasize
29 this - in order to make possible new openings substantially
30



1 earlier than would be the case without generous assist-
2 ance. There are several reasons for this view. I
3 have mentioned them earlier: to avoid complete dependence
4 on foreign coal in the event of war. As I say, the last
5 war we were expected here to produce the maximum of coal
6 possible.

7 I have already mentioned that a mine closed, in
8 all probability it is gone for all times. Above all, I
9 emphasize the community and the regional aspect in the
10 closing of a mine. It should not be thought for a moment
11 that alternative employment can be readily supplied in
12 any community so affected. Our experience does not
13 support that.

14 While the Submission recommends - I will mention
15 in a minute - additional incentives for industry, our
16 people thought it would be far from easy to attract new
17 industries into those coal mine areas even with these
18 additional incentives; though I would certainly think
19 additional incentives would be helpful now for the areas
20 as a whole. As far as those communities are concerned,
21 the closing of a mine may well mean therefore the death,
22 or certainly the self-mutilation of the community.

23 It is submitted, with respect to subventions,
24 that these should be maintained at a level adequate to
25 preserve the industry pending the anticipated growth
26 in coal markets, and pending full exploration of all
27 possibilities of lowering the cost of coal production,
28 including the feasibility of such an opening as I have
29 mentioned.
30



1 Above all, I emphasize that even if the outlook
2 that I have expressed for the coal industry is consider-
3 ed to be optimistic, alternative employment must be
4 provided, and employment in the mines must be preserved
5 by subventions until alternative employment is provided.

6 We recognize that the people of Nova Scotia must
7 do their part also in assisting in a solution of the coal
8 mining problem. Emphasizing that the problem is National,
9 we are not forgetting that it is also Provincial. It is
10 indeed noteworthy, I think, that the Nova Scotia market
11 for coal has not shrunk, at least to any extent, and we
12 recognize also that one of the most promising markets
13 for coal in the years ahead lies in the vast thermal
14 power stations in our Province.

15 Our Submission makes clear, in the chapter dealing
16 with electric power, that the tradition in the past in
17 this Province has been to develop our relatively limited
18 hydro resources. In other words, to develop as they
19 were needed the relatively small hydro resources we have
20 available. The basis for this was, presumably, because
21 these resources are Provincial resources and they produce
22 cheaper power than would be available from any other
23 source. On the other hand, as it is clear from the
24 Submission, thermal power has been increasing in relative
25 importance and coal has been used generally in the develop-
26 ment of thermal power in this Province.

27 Two questions arise, however. First of all,
28 should the only remaining undeveloped substantial site,
29 that is Wreck Cove which is mentioned in the submission,
30



1 should that be developed in view of the recurrent
2 difficulties?

3 Secondly: should oil be used to generate electric
4 power in this Province where oil is substantially cheaper
5 than coal?

6 Studies indicate that some 250,000,000 kilowatt
7 hours a year could be developed at Wreck Cove - ironically,
8 that is in Cape Breton not too far away from the coal
9 mines - at a substantially smaller cost than power
10 developed from coal. Indeed, studies indicate the
11 difference in cost might be of the order of four mills
12 per kilowatt hours. Some would argue the difference would
13 be greater than that.

14 Consequently, it has been estimated that the full
15 development and utilization of the Wreck Cove project
16 might save the people of this Province approximately
17 one million dollars a year, as opposed to developing the
18 equivalent power from coal. To develop that power it
19 would require approximately 125,000 tons of coal annually.
20 That is, to develop the equivalent amount of power from
21 coal would use about 125,000 tons. It is clear, therefore,
22 that if the Province foregoes the development of Wreck
23 Cove, it is foregoing a substantial saving. To put the
24 matter another way: If the power were supplied from
25 thermal stations rather than Wreck Cove, a substantial
26 subsidy for the coal industry would be involved.

27 If the figuring is right, it would involve a
28 subsidy of \$7.00 to \$8.00 per ton of coal used. On the
29 other hand, we recognize that if we in this Province are
30



1 to seek special consideration for our coal, we must also
2 be prepared to grant such consideration.

3 When the appointment of the Commission was
4 announced, it appeared to the Government of the Province
5 that the Commission might wish to give consideration to
6 the proper course to be followed - in the development of
7 electric power in Nova Scotia, and the Commission might
8 wish to express some view on that matter. If that is the
9 case, then the Province would be pleased indeed to place
10 in the hands of the Commission any relevant information.

11 We recognize, of course, the responsibility for
12 the ultimate decision would rest with the Province of
13 Nova Scotia, and in saying this we are not attempting to
14 transfer any responsibility to the Commission. It is
15 simply that this is a matter which the Commission might
16 like to consider.

17 The second question that arises in connection
18 with electric power is the relative cheapness of oil in
19 some points in the Province. Now the Government of
20 Canada, as we have shown in our submission, although I
21 skipped over this this morning, inaugurated, effective
22 in 1957, a subvention program of coal designed to equal-
23 ize the cost of coal in power stations in Nova Scotia
24 with the price in Southern Ontario, in terms of B.T.U.'s.

25 The purpose was to ensure that industries in this
26 Province would not suffer because coal was higher in
27 price here than in Southern Ontario, and at the same
28 time to assist coal in keeping that market. The subsidies
29 are paid by the Government of Canada on every ton of
30



1 coal used for the development of electric power in Nova
2 Scotia and New Brunswick.

3 Subsidies are paid on every ton of coal used.
4 They are paid to industrial users of coal only. In
5 other words, commercial and domestic users of power do
6 not receive the benefit of the subsidy; rather, it is
7 concentrated on industrial power rates. This has had
8 the effect of reducing substantially the cost of electric
9 power in industries in those parts of Nova Scotia served
10 in whole or in part by power generated from coal.

11 We may receive some suggestions that it should be
12 that the subvention might be made open, but in any event,
13 certainly the effect has been to substantially reduce
14 the cost of power in industries in those parts of this
15 Province using electric energy generated from coal.
16 Therefore, while at a given power station coal may cost
17 more than oil would, the subsidy ensures within broad
18 limits at least that the competitive position of our
19 industries, which are competing with industries in other
20 provinces, is not affected by the use of coal in the
21 generation of our electric energy.

22 If coal is more expensive than oil, then presumably
23 the cost of power to domestic and commercial users would
24 be somewhat higher than if oil were used.

25 The subsidy ensures, however, that industries
26 which are competitive, and compete with other industries
27 outside the Province are not prejudiced because the
28 subvention, which is concentrated on Industrial power,
29 ensures industrial rates are kept down.
30



1 I can well understand the desire of utilities
2 selling electric power to sell their power at the
3 lowest possible rate to all their customers, and that is
4 a very desirable attitude for a utility to have. I would
5 suggest, however, that the domestic and commercial users
6 of electricity in Nova Scotia should be prepared to pay
7 a modest amount for their electricity, in support of
8 their coal industry. The great virtue of the Federal
9 Subsidy Program is, as I say, it offers protection to our
10 coal industry without injuring our manufacturing industry.

11 Certainly one contribution Nova Scotia can make
12 towards the coal industry is to endorse the burning of
13 coal in our utilities even though coal may be from time
14 to time higher in price than oil.

15 Representatives of the United States coal interest
16 have already presented certain views to the Commission,
17 and their desire to sell their own products in this
18 country is quite understandable. If I might say so,
19 their comments on the quality of the Nova Scotia product
20 are gratuitous and I suggest with respect, the views
21 expressed by these gentlemen with regard to the policy
22 that Canada should pursue are expressed with interest
23 other than Canadian interest in mind. No one doubts the
24 vast resources of Nova Scotia coal available for mining.

25 I understand that we have only a limited amount
26 of good metalurgical coal available, and consequently
27 we might not be able to meet satisfactorily the metalurg-
28 ical requirements of Central Canada, even if that market
29 were available to us. Our coal, however, is quite
30 satisfactory for general industrial purposes, and for the



1 development of electric energy. In considering what
2 portion of the Canadian market should be made available
3 to Nova Scotia coal, I would hope the Canadian people
4 would bear in mind the need and the difficulties of the
5 coal mining area.

6 Admittedly, subventions on a scale that I have
7 indicated are costly, and there is a tendency for people
8 in some parts of this country to regard a subvention as
9 something rather disreputable. The same people may,
10 however, regard tariff protection as eminently respect-
11 able, and the embodiment of a very sound development
12 principle.

13 There is, of course, no difference in substance
14 between tariff protection and subsidy. The people of
15 Central Canada derive the benefit of very substantial
16 subsidies involved in the tariff protection they receive.
17 Indeed, Central Canada has been built upon tariff policy.
18 That is, upon subsidy. It seems to me, therefore, and
19 I am sure to the people of Nova Scotia that it is not
20 unreasonable for the area that receives such substantial
21 benefits from tariff to be prepared to take in return a
22 relatively modest amount of coal required to keep our
23 industry in a sound position.

24 Now sir, with regard to the coal industry I have
25 attempted to outline the background, study the current
26 problem and suggest measures that should be taken to
27 help it. I tried to indicate that coal, as such, has
28 a good future if the price can be competitive, and every
29 effort should be made to see that it can be competitive,
30



1 if possible.

2 I have urged that subventions be maintained at
3 a level necessary to preserve the industry, but the need
4 for additional job opportunities in the traditional
5 coal mining areas of Nova Scotia makes obvious, I think,
6 the need for encouraging manufacturing in order to
7 provide employment and diversification. The possibilities
8 of attracting light industry will vary from community to
9 community.

10 Expansion of the steel industry in Sydney should,
11 as I say, be the settled policy of all levels of Govern-
12 ment and further, assistance in transportation may well
13 be required and special consideration by all taxing
14 authorities is recommended. In considering the encour-
15 agement of manufacturing in the coal mining communities,
16 reduced transportation costs would be an important factor.
17 These are already under consideration by the Royal
18 Commission on Transportation.

19 Cost should not be the only concern, however,
20 because the cost of transportation is only one of the
21 disadvantages of location. We recommend, therefore, that
22 new industries or additions to existing industries should
23 receive special tax concessions by the Federal Government.
24 The nature of those concessions would have to be worked
25 out, presumably, with the officials in the Department
26 of National Revenue.

27 The printed submission, I suggest sir, shows
28 clearly the need for additional job opportunities in
29 those traditional coal mining communities in the Province.
30 Cumberland and Pictou, Inverness and Cape Breton Counties,



1 in all these Counties employment in the coal mines has
2 shrunk very substantially in recent years. In all these
3 Counties acute employment difficulties have arisen be-
4 cause of the loss of employment in the coal mines.

5 As I have pointed out, there is today a sub-
6 stantial amount of manufacturing in Cumberland and
7 Pictou Counties, certainly in the City of Sydney but it
8 is not sufficient to provide enough employment and there
9 is enough industry there to indicate clearly that with
10 some additional incentive sufficient industry can be
11 encouraged to provide reasonably adequate amount of
12 employment, not necessarily in every community.

13 It may not be possible, even with incentives, to
14 attract an industry into every particular community, but
15 I would be confident the areas generally which are with-
16 in the community limits can be successful. The submission,
17 I think, shows the Province has been doing everything it
18 can in this connection but some further inducement is
19 required.

20 The Province has been able to make available
21 timber lands and grant sufficient other encouragement to
22 ensure the people of a new pulp mill at the Strait of
23 Canso. This pulp mill will substantially strengthen the
24 economy of Eastern Nova Scotia, especially the economy
25 of Cape Breton Island but more is needed. We see an
26 opportunity for more fish processing in Cape Breton. We
27 are convinced that the Island will grow in importance,
28 but more employment industry is required. To ensure
29 the expansion of the steel industry in Sydney National
30 assistance will be required. The submission refers to the



1 study commissioned by the Province. This will be
2 available shortly and will be made available to the
3 Commission. I believe, however, the study will indicate
4 clearly that the assistance of the Government of Canada
5 will be required to ensure the maximum development of
6 the steel industry in Sydney.



1 As I said our industrial problems are the result
2 of Geography and Location. I am confident that the Royal
3 Commission on Transportation will give sympathetic
4 consideration to our needs in the realm of transportation
5 policy. There are, however, more problems involved in
6 location than simply the cost of transportation. The
7 flat mill which Dosco proposes to build at Contrecoeur
8 is a case in point. There is clearly more involved than
9 the company's decision than simply the matter of transp-
10 ortation. To encourage and develop sufficient job oppor-
11 tunities in the coal mining areas some additional incent-
12 ives and encouragement are required for industry.

13 We therefore respectfully submit to the Commission
14 that the Parliament of Canada should grant special tax
15 concessions to industry in this area. Such concessions
16 together with appropriate arrangements for transportation,
17 plus vigorous efforts on behalf of the Government of
18 Nova Scotia and the communities concerned should result
19 in the development of sufficient employment opportunities
20 in this region to ensure a good future.

21 But every effort must be made to preserve the
22 coal industry. While I believe employment in coal
23 mining should be supplemented by new industry, I do not
24 believe anyone should assume that new industry can be
25 placed in all the coal mining areas in sufficient volume
26 in the near future to replace employment in the coal
27 mines. New industry should be regarded as a supplement,
28 rather than a substitute for coal mining employment.

29 In closing, I would say sir that coal I believe
30 has a good future if we can preserve our industry and



1 improve its efficiency so that it will be competitive
2 in price. That surely must be the aim of all concerned.

3 I apologize for the length of my submission, and
4 thank you very much indeed for your courtesy over such
5 a long time.

6 THE CHAIRMAN: Thank you very much. While you
7 were making those statements I was just wondering how
8 far do you think the Federal Government should go in the
9 way of subvention. Is there any limit, or if there is
10 a limit, on what principles would it be based?

11 HONOURABLE MR. STANFIELD: The principle I have
12 suggested, sir, is the maintenance of the mines during
13 what I believe is an interim period, pending the develop-
14 ment of more markets. It is suggested that the mines
15 should be preserved, pending the development of the
16 market, and pending full exploration of all possibilities
17 of reducing the cost.

18 THE CHAIRMAN: Upon whom would you place the
19 primary responsibility for that?

20 HONOURABLE MR. STANFIELD: I suggest that it is
21 a responsibility that is beyond the capacity of the
22 Government of Nova Scotia. I suggest it is a respons-
23 ibility that should be accepted on that basis by the
24 Government of Canada. We have indicated and shown, I
25 think, in a very tangible way that the Province of Nova
26 Scotia is prepared to co-operate. We have not only
27 assumed the responsibility shown here with regards to
28 small mining operations but we have participated very
29 substantially in the assistance rendered in the industry
30 generally, and we have indicated we are prepared to



1 continue that assistance.

2 THE CHAIRMAN: Let me put it this way. Suppose
3 the Province of Alberta claims the right to be given a
4 subsidy to enter the Province of Ontario in competition
5 with American coal. What would be the answer?

6 HONOURABLE MR. STANFIELD: I would suggest that
7 the case in respect to the Province of Alberta would not
8 be anything like what we are faced with.

9 I recognize the closing of a coal mine in a
10 community in Alberta must have a very severe effect upon
11 that community; however, there have been very substantial
12 developments in the general economy of Alberta. I suggest
13 the economy of Alberta is in a much better position to
14 withstand such a shock, and it is considerably more
15 diversified. There are growing industries and more
16 opportunities for employment within the province, and
17 as a result of oil developments, the Province is in a
18 much better position to effect any adjustments that
19 might be necessary.

20 Therefore I would suggest that the case in Alberta
21 would not be on the same footing.

22 THE CHAIRMAN: That means it really depends upon
23 the actual situation of any Province, and its ability
24 to deal with the problems that have arisen.

25 HONOURABLE MR. STANFIELD: The ability of the
26 Province plus the relative importance of the problem,
27 plus the concentration of the problem in certain areas.

28 THE CHAIRMAN: Of course the coal in Cape Breton
29 is in the unfortunate position of steady advancement in
30 cost, because you can proceed in one direction, and that



1 direction is under the sea. Would you place a limit upon
2 that advance where it inevitably requires a slow increase
3 in costs of mining? Can that go on indefinitely?

4 HONOURABLE MR. STANFIELD: I do not believe it
5 has been demonstrated yet by anyone that that is inevit-
6 able. I am not an expert in this subject, but I under-
7 stand that there are possibilities of low cost operation
8 in the Cape Breton area through a new pit operation that
9 would be the possible alternative to continually going
10 further away out under the sea. The suggestion is that such
11 a possibility should be very fully explored before we
12 necessarily assume the trend in costs would be inevitable.

13 THE CHAIRMAN: I suppose it might be asked that
14 since the difficulties in this coal situation in relation
15 to oil have been apparent now for four or five years,
16 what has been done to see what the future requires in
17 the way of limiting costs? Certainly it strikes me as
18 being without any real basis to say that a mode of
19 operation can continue indefinitely to stand the addition-
20 al cost, but if you open new mines which would undoubtedly
21 be more economic, are you going to abandon the old?

22 HONOURABLE MR. STANFIELD: I would presume that
23 there would be no objection to abandoning the old if the
24 new mine offered a reasonable alternative for employment.

25 THE CHAIRMAN: If they did not, suppose the
26 new mines would be equipped in such a manner that the
27 working force would be reduced?

28 HONOURABLE MR. STANFIELD: I think, sir, that we
29 must all recognize that technological improvements in
30 any modern industry over a period of years will result



1 in the same volume being produced with fewer men. I
2 think that has been clearly demonstrated in the United
3 States in the coal industry, and I understand they can
4 now produce the volume there with a fraction of the
5 personnel they needed a generation ago. I would think
6 that we would have to face the prospect of a given volume
7 of coal being produced with fewer men as the years go
8 by.

9 That, however, would not result in any great
10 problem if it is accompanied by incentives to attract
11 additional industry into these counties. Then, as the
12 employment in the coal industry drops, if it has to drop,
13 in other words if the market through the years does not
14 increase enough to offset the technological improvements,
15 then we have to look to other industries to supply the
16 additional employment, and that is one reason why I made
17 such emphasis in closing upon that aspect.

18 THE CHAIRMAN: Yes, I suppose we would all like
19 to see industry proceed with population, but that is
20 what is being done by every community on earth, so far
21 as I can see. They are all struggling to see what new
22 industries they can attract, how to increase the popul-
23 ation, and at the same time increase the industry along
24 with it.

25 At some time we must recognize limiting factors.
26 It may be, this is not the time to do it, but you have
27 had difficulty in introducing new industry to Cape Breton,
28 and your experience I think, has been with very capable
29 personnel, which has not been such as to allow you to
30 make any concrete suggestions to date.



1 HONOURABLE MR. STANFIELD: With regard to what
2 aspect?

3 THE CHAIRMAN: New industries.

4 HONOURABLE MR. STANFIELD: I would suggest, sir,
5 that in addition to the consideration that I hope will
6 be given to our transportation problems and which are
7 being presented in detail to the Royal Commission on
8 Transportation, I have suggested that we need further
9 inducements, and I suggest specifically a tax incentive.

10 I would not undertake to suggest precisely what
11 form that incentive should take, because I would think
12 that would have to be discussed, as I suggested, with the
13 Department of National Revenue, in order to fit in with
14 their general taxing scheme. Something we might suggest
15 might be considered by them to be quite unworkable.

16 THE CHAIRMAN: I was wondering how you would
17 consider a tax on industrial consumption of oil.

18 HONOURABLE MR. STANFIELD: That question has
19 been raised with us sir. It has been suggested by the
20 coal industry and by the Unions concerned that the
21 Province should impose a tax on heavy oils, at least
22 residual oils. We have not been satisfied that that
23 would accomplish the result necessary now and in the
24 future.

25 I would distinguish between the problem resulting
26 from imported oils on the one hand, and on the other
27 those oils that are processed that are the result of
28 the manufacture in Maine and domestic heating oils here.

29 THE CHAIRMAN: Even if the crude oil was brought in?
30



1 HONOURABLE MR. STANFIELD: Supposing the crude
2 was brought in and we placed a Provincial tax on the
3 sale of certain heavy oil, I would fear that the company
4 refining the oil producing gasoline and these other
5 products, I would feel we would have to dispose of the
6 various products of the refinement process in this general
7 area, and if we were to place a tax on certain oil, the
8 only effect might be that the company would reduce the
9 price sufficiently to continue to sell those products,
10 and feel it necessary, to compensate itself, to increase
11 the price of gasoline.

12 THE CHAIRMAN: That would be affected by the
13 refinement of the Canadian crude oil.

14 HONOURABLE MR. STANFIELD: Yes. I am thinking
15 of refining of the crude within the country.

16 THE CHAIRMAN: Would that be affected by the
17 sale of gasoline refined from Canadian crude which would
18 not be taxed?

19 HONOURABLE MR. STANFIELD: Excuse me, sir. I
20 have been talking about something different. You are
21 perhaps directing your question to a tariff.

22 THE CHAIRMAN: No, I understood you to say if
23 you taxed residual oil the price would be lowered, and
24 the price of the higher fractions would be raised.

25 HONOURABLE MR. STANFIELD: That is what I would
26 fear.

27 THE CHAIRMAN: All I am suggesting is the tax
28 would not apply to the higher fractions refined from
29 Canadian crude oil, and that would help the price down,
30 wouldn't it?



1 HONOURABLE MR. STANFIELD: It would appear to
2 me that a refinery in Canada manufacturing those products
3 has so much residual oil to place on the market. The
4 price received from residual oils, I understand, fluctuates
5 quite violently anyway. If they agree to market that at
6 a price at which they will sell if we are putting a tax
7 on it, the only effect may be that the company, in order
8 to reduce its price, would try to make it up by increas-
9 ing the price of gas. It might be argued they could not
10 increase the price of gas because of the possibility of
11 gas being imported from somewhere else.

12 THE CHAIRMAN: It would be refined from oil
13 brought in from, say, Alberta.

14 HONOURABLE MR. STANFIELD: I beg your pardon?

15 THE CHAIRMAN: The price of gasoline refined from
16 oil in Alberta would not be subject to any special tax
17 treatment, and wouldn't that hold down any increase in
18 gas made from foreign crude. You would not tax the
19 residual oils resulting from crude brought into this
20 Province from Alberta or any other Province. What you
21 have suggested was a tax only on the residual oil from
22 foreign crude brought into this country.

23 HONOURABLE MR. STANFIELD: I don't think so,
24 sir. I had not thought at least that we could impose a
25 tax on that within the Province.

26 THE CHAIRMAN: You put that on as you would put
27 it on tobacco, probably.

28 HONOURABLE MR. STANFIELD: It had not occurred to
29 me we could discriminate within the province in relation
30 to where the oil comes from.



1 THE CHAIRMAN: I do not think you would have
2 any difficulty in that.

3 HONOURABLE MR. STANFIELD: We had assumed here
4 that we were going to follow the Constitution.

5 THE CHAIRMAN: Thank you.

6 HONOURABLE MR. STANFIELD: Just one other point,
7 Mr. Commissioner, in consideration of how far one goes
8 to bring in new industry. You mentioned everyone wants
9 a new industry. Of course that is so. You raised the
10 question as to how far one should go and where should
11 one stop. Our approach down here is something like this.
12 As you well know, sir, we say we are part of the nation,
13 and we say that strict principles of economics have never
14 been applied anyway in the development of Canada, and it
15 has been a National policy which has been pursued through-
16 out the years, and that, in consequence of that and in
17 consequence of geography, we have been at a disadvant-
18 age. We are suggesting, just as it imposed tariffs which
19 were done to the principal benefit of Central Canada,
20 that same nation should be prepared to take measures
21 which would give us the opportunity of developing and
22 attracting and encouraging industry. I would suggest
23 most respectfully that with regard to the whole National
24 picture, the amount of subsidy or special treatment that
25 would be involved to do this would be very small indeed,
26 compared to the amount of subsidy or special treatment in-
27 volved in the National policy which now exists and which
28 has become acceptable through the years and has now been
29 taken for granted.
30



1 THE CHAIRMAN: But even the tariff has limiting
2 factors in it.

3 HONOURABLE MR. STANFIELD: Yes.

4 THE CHAIRMAN: So there is a practical limit,
5 whether it is a radical limit or not. I quite appreciate
6 what you are saying, and I was wondering whether we could
7 get any idea that would operate as a sort of self-operat-
8 ing limitation, because there is no limit to what may be
9 required. Suppose you ask to send coal to Winnipeg. What
10 is the answer to that?

11 HONOURABLE MR. STANFIELD: I agree while it is
12 very difficult for one to state a principle as to what
13 the limit should be, I agree that there should be and
14 there will in fact be some practical limit, although I
15 could not undertake to suggest here what it should be.

16 THE CHAIRMAN: Suppose that request were made,
17 that you want to enter the Winnipeg market because of
18 a tremendous demand for a thermal power plant. What
19 would be the answer given there that might not apply to
20 Ontario or to Quebec or to New Brunswick.

21 HONOURABLE MR. STANFIELD: Admittedly it is a
22 difference in degree.

23 THE CHAIRMAN: Yes, but what is the limit of
24 degree.

25 HONOURABLE MR. STANFIELD: That is difficult to
26 state with any degree of precision, but perhaps I can
27 put it this way, that it has been recognized for some
28 years that our coal will be assisted in the Quebec market,
29 that the market has been threatened very substantially
30 by natural gas which comes from the west over a government



1 subsidized pipe line. I think it would be reasonable
2 to suggest that it is in keeping with the conditions
3 and in keeping with the policies that have been pursued
4 for some years, that we should be assisted in keeping that
5 market in Quebec, and to some extent Eastern Ontario, at
6 least until alternative markets develop or at least until
7 other job opportunities can be provided. I admit that
8 is a pretty general sort of statement. I don't know
9 if it is possible.

10 THE CHAIRMAN: I agree. I don't know anything
11 more difficult than a question of judgement.

12 THE PREMIER: Thank you sir.

13 THE CHAIRMAN: If I might ask one more question.
14 Again, I suppose it involves questions of judgment which
15 are not capable of being specific, but would you concede
16 that any resource of that sort, has what you might call
17 a natural market but that there are bounds to that
18 natural market?

19 THE PREMIER: I have difficulty sir in attempting
20 to define "natural market" just as I think in business
21 today there is hardly ever a decision taken on purely
22 business grounds; I think there are very few decisions
23 today made in Government on purely economic grounds.

24 Certainly we had sort of a completely laissez-
25 faire economy envisaged by all classes of economists.
26 Surely a natural market for coal would be determined
27 purely and simply by the market with which it could
28 compete, and which could give us a profit. I suggest,
29 with respect, that there are not too many industries of
30



1 National importance which are treated on that basis in
2 this country, and while I would agree that there must
3 be in fact some limit upon how far the National Govern-
4 ment should be expected to go to preserve an industry,
5 I do suggest it is not as if the market for coal were
6 clearly on the way out.

7 I think the market, by many indications the
8 market for coal is all right if the price is going to
9 be all right, and what I am really suggesting, as urgently
10 as I can, is that the industry should be preserved and
11 every effort should be made to see whether costs can't
12 be reduced. I suggest, as I indicated as I went along,
13 that production costs were increasing at a substantial
14 rate when these difficulties developed.

15 THE CHAIRMAN: I quite agree, Mr. Premier, but
16 I was just wondering on that very question of decreasing
17 the cost of production isn't that primarily a matter of
18 the Province? It is your natural resource. You have
19 an immediate control over it. It is your community or
20 your Province that is vitally affected. Wouldn't the
21 initiation normally come from your Province? I am just
22 asking for information.

23 THE PREMIER: I think the answer to that must
24 be given in terms of the way this problem developed and
25 the discussions that ensued therefrom. It was agreed
26 between the Government of Nova Scotia and the Government
27 of Canada in the spring of 1959 that an enquiry would
28 be conducted into coal mining in Nova Scotia to see what
29 the answers were. This was an agreement reached following
30 an agreement between the two governments to assess the



1 assistance for the time being, to the industry.

2 We met with the officials of the Government of
3 Canada. Certainly we wanted their co-operation in the
4 matter. We were certainly prepared, and prepared at any
5 time to undertake any studies of an expert nature into
6 this problem. We thought it was important to have the
7 Government of Canada associated with us because we did
8 not want just to go off on our own and conduct certain
9 studies that perhaps they feel were not as well conducted
10 as they should have been. We were interested in having
11 a joint study: I think the Federal Government was
12 interested in having a joint study, and consequently,
13 as I say, the Government of Nova Scotia is quite prepared
14 to accept the responsibility for doing anything that
15 is possible to reduce costs. The conclusion was reached
16 that the best way to proceed, the most satisfactory way
17 to proceed was through a Royal Commission.

18 THE CHAIRMAN: Yes, I agree but I was thinking of
19 it as a general question but I quite follow you Mr.
20 Premier.

21 THE SECRETARY: Mr. Commissioner, I would like
22 to call upon Mr. A.R. Harrington who will present a
23 brief on behalf of the Nova Scotia Light and Power
24 Company Limited and this brief will become Exhibit No.
25 22.

26 ---EXHIBIT No. 22: brief submitted by the Nova Scotia
27 Light and Power Company Limited.

28 MR. MARSH: Before this is done, can I have an
29 answer to a question that is of importance to us? Before
30 the Premier leaves? The question is Mr. Commissioner



1 that we are very interested in the tax on oil, and he
2 mentioned the fact it would be discriminatory. Now
3 there is a royalty tax on coal to the extent of twelve
4 and a half cents on every ton of coal sold, or coal
5 produced and back in 1932 or 1933 there was a law passed
6 to tax foreign oil, but it was never proclaimed.

7 Now I get the understanding from the Premier
8 that there is an impossibility of passing such a law on
9 foreign oil, and I would like to get that clarified
10 because it was passed back in 1932.

11 THE CHAIRMAN: It is quite true that the
12 Province cannot put an import tax on anything. What I
13 was suggesting was the consumption tax, that is taxing
14 the person who purchases it and consumes the oil.

15 MR. MARSH: That is what is very important.
16 We know that on the crude coming in, it has a tariff
17 that is paid, but I am talking about Provincial taxes
18 on the refined products.

19 THE CHAIRMAN: I think that involves a question
20 of broad policy for the Province, and there are consid-
21 erations for it and against it too.

22 MR. MARSH: I understand that, but the point I am
23 trying to find out is this: I find today that it is
24 virtually impossible and the word used was "discrimina-
25 tion", now there is a royalty tax on coal. You see it
26 puzzles me. It's discrimination against coal.

27 THE CHAIRMAN: The royalty is in the nature of
28 a charge for obtaining the coal from the ground. It is
29 a small purchase price, as I understand that.

30 THE PREMIER: Yes. The Province owns the coal



1 resources and the royalty on coal - there is no difficulty
2 about that - it is a matter of law because the Province
3 is only exacting a small price for ---

4 THE CHAIRMAN: In the form of rent.

5 THE PREMIER: ---what it owns. I have assumed,
6 that if we would place a tax on residual oils, any type
7 of oil, it would have to be a general tax applicable to
8 all sales of that type within the Province, and that we
9 could not use such a consumption tax indirectly to dis-
10 criminate, say, against foreign oil or any particular
11 type of oil coming in from outside the Province.

12 We will be happy to inquire further into that
13 constitutional difficulty. We have perhaps taken too
14 much for granted.

15 MR. MARSH: The main point, Mr. Commissioner, I
16 was trying to determine, was whether it was possible or
17 impossible to do so, and when I felt that the answer
18 showed there is an impossibility, in view of our consid-
19 eration of the tremendous importance we place on a tax,
20 and the tariff on oil, it is virtually chasing us out of
21 our natural market which you mentioned before.



SUBMISSION ON BEHALF OF

THE NOVA SCOTIA LIGHT AND POWER COMPANY LIMITED.

APPEARANCES:

MR. A.R. HARRINGTON.

MR. HARRINGTON: Sir I would like to state on behalf of the Nova Scotia Light and Power Company Limited our pleasure in being allowed to participate in the provision of information to you and to hear your assessment of the coal situation.

I state that our brief is made on behalf of a large consumer of coal, and a possible even larger future consumer of coal. It is made on behalf of an industry which is in an off-beat situation, being charged with the possibility of producing our service and our product in the most efficient manner, but yet an industry which in fact is not doing that very thing, and has not done that very thing when in the past it has burned Nova Scotia coal instead of oil or other fuels which were cheaper and which is presently, in a very large measure, in spite of the fact that other fuels are cheaper.

Now with respect to that contradictory responsibility that is placed on our industry, that, as we must admit and it was raised by the Premier in the Submission of the Government, has been alleviated to a great extent by the Atlantic Power Development Act. However, we are still in a position that we have to make decisions, with respect to these decisions that are difficult to make, and decisions which are difficult to absorb within the company, especially when all our efforts, we feel, and



1 our responsibility, should be towards the most efficient
2 administration of our service and the most efficient
3 production of our product.

4 It is not suggested by our company that we should
5 be relieved of all citizenship responsibilities. We
6 feel as a company, as a corporation that we have corporate
7 citizen responsibilities and we must participate in the
8 economy of the Province as any other citizen. In fact,
9 we feel that the very basis of the free enterprise system
10 insists that the corporation do such a thing, and unless
11 they do such a thing, the free enterprise, which we feel
12 is essential to our very way of life, will become a case
13 where we would seek to tie ourselves say to the apron
14 strings of a maternalistic Government and our development
15 would be hindered in the same way that a child's develop-
16 ment is hindered and his initiative is hindered if he is
17 tied to his mother's apron strings.

18 We have prepared this report sir, this brief. We
19 have filed one Exhibit with the brief, namely, a pamphlet
20 put out by the U.S. Government giving the steam electric
21 plant factors of 1958 produced by the National Coal
22 Association, and we have only submitted the one copy of
23 that Exhibit, sir. The other appendices referred to in
24 the brief are included in the back of the brief.

25 If it would be in order sir, I would read the
26 brief summarizing those pages which are mainly statistical
27 and if it would be in order sir, please stop me at such
28 time as you may wish to adjourn.

29 In this first part of the brief we have placed
30



- 1 a summary at the front of the brief giving the points
2 that the company wishes to raise in the brief.
- 3 1. Nova Scotia has difficulty in competing with the
4 highly developed areas of Quebec and Ontario with
5 respect to the cost of electric energy due to Nova
6 Scotia's natural deficiency in cheap hydro.
 - 7 2. Nova Scotia competes favourably with electric
8 utilities along the Eastern Seaboard of the United
9 States for all users except primary industry.
 - 10 3. The cost disadvantage in Nova Scotia for primary users
11 with respect to the Atlantic Seaboard of the United
12 States is due to higher fuel costs in Nova Scotia
13 for Thermal Generation.
 - 14 4. Very long term trends do not necessarily indicate
15 that present types of Thermal Plant will be the
16 only source for future generation.
 - 17 5. The Saint John River, the Hamilton River in Labrador,
18 Atomic Power, Tidal Power and new concepts of thermal
19 generation may supplant the present type of thermal
20 plant as the sources of future generation.
 - 21 6. The development of economic natural resources for
22 power generation, should not be postponed because
23 of conditions existing in the coal industry.
 - 24 7. Utilities must be free to design plant and to
25 produce electric energy from the cheapest source.
 - 26 8. Nova Scotia Light and Power Company, Limited present-
27 ly uses the equivalent of approximately 184,000 tons
28 of coal per year. This could increase to 678,000
29 tons by 1969.
 - 30 9. The present use of coal in Thermal Plants in Nova



- 1 Scotia is approximately nine per cent of the coal
2 produced in this Province.
- 3 10. The coal purchases of the utility industry are not
4 sufficient to provide a cure for the market
5 requirements of the Nova Scotia Coal Industry.
- 6 11. Coal costs approximately 20 per cent more than
7 residual oils at the present time.
- 8 12. In designing a new 100,000 K.W. Thermal Station
9 for installation at Tufts Cove, cost analysis indic-
10 ates a saving in fuel cost of almost \$800,000 a year
11 if oil is used as a fuel instead of coal.
- 12 13. In designing a 100,000 K.W. Thermal Plant at Tufts
13 Cove, a capital saving of \$1,550,000 would be
14 realized if the plant is installed with oil as a fuel
15 instead of coal.
- 16 14. American medium grade coal can be landed at Halifax
17 for approximately the same cost as residual oils and
18 considerably less than Nova Scotia Coal.
- 19 15. Subventions are being paid to equalize the cost of
20 Nova Scotia coal with American coal in the Quebec
21 area. These subventions are not paid in Halifax
22 where similar market conditions exist and thus
23 discrimination occurs.
- 24 16. Subventions are paid by the Government of Canada
25 on electric energy generated by coal to industrial
26 users in Nova Scotia.
- 27 17. In the Provincial formula for the distribution of
28 subventions by the Government of Canada, provision
29 is made for a reserve fund. This fund is important.
30 It can be used to assist the development of an



1 industry if thermal power costs in the area are
2 such that it is uneconomical for the industry to
3 locate here.

4 18. Thermal power plants do not require first quality
5 coal, however they require large quantities of
6 coal of uniform quality, mixtures of small quantities
7 of non-uniform quality create operating problems
8 which reflect on cost.

9 19. Present methods of marketing coal must be changed
10 if this fuel is to be favourably considered by
11 utilities for thermal power plants.

12 20. Utilities must demand price adjustment for quality
13 variations with respect to moisture, ash and sulphur
14 content as well as calorific value.

15 21. Cost of energy produced from a fuel is the true
16 measure of its value to the utility.

17 22. For proper development of the electric utility
18 industry its tariffs must be designed to be compet-
19 itive with other fuels for cooking, heat processes,
20 etc. The tariffs of the electric utilities are set
21 by a Provincial regulatory body, whereas the prices
22 of other competitive fuels are not so regulated.

23 23. Industrial consultants employed by Nova Scotia
24 Light and Power Company, Limited have stated that
25 in addition to having the cost of the electric
26 energy attractive to industry, the cost to employees
27 of that industry must also be low in order to make
28 an area competitive in industrial development.

29 24. Consideration of any fuel policy with respect
30 to electric generation, must recognize the needs



1 of all classes of customers. The competitive
2 position of energy sold to domestic and small power
3 customers with respect to alternative regions is
4 important.

5 25. Electric Utilities are unable properly to contribute
6 to the economic development of the area if they are
7 required directly or indirectly to subsidize the
8 coal industry.

9 26. If because of National Development or regional
10 development the coal industry requires subsidization,
11 then this should be taken care of without upsetting
12 the economy of utility operation. That is, if
13 Utilities are to be encouraged to use coal as a
14 fuel, then it should be made competitive with the
15 cheapest fuel by other agencies.

16
17 ECONOMIC ASPECTS OF ELECTRIC POWER GENERATION IN NOVA
18 SCOTIA

19 Electric energy is essential to the day to day
20 functioning of any region affecting people in all walks
21 of life, in the home and on the farm, in business and in
22 industry. For the proper economic development of a region,
23 electricity must be available for all classes of users
24 at prices that are competitive with other regions. For
25 the home, farm, business and small industry generating
26 costs represent 25 to 30 per cent of the total cost of
27 delivering electricity to the consumer. The cost of the
28 large network of distribution lines, together with service
29 costs makes up the difference. For large industry,
30 however, since it is usually served at transmission level,



1 the generating cost can amount to over 70 per cent of the
2 total cost.

3 Nova Scotia has always been at a cost disadvantage
4 compared to some areas in Canada in the generation of
5 electric energy. Due to its geographical and topographic
6 features, there are no large watersheds for hydro power
7 generation. Hydro sources within the Province are
8 expected to be completely developed within the next five
9 years. The present position of hydro to thermal gener-
10 ation by utilities within the Province is that, more than
11 60 per cent of the power requirements is produced from
12 thermal plants. This percentage will increase greatly
13 in the next ten years.

14 From a competitive standpoint, large industrialized
15 areas have an advantage over smaller areas in the field
16 of thermal generation since thermal power can be gener-
17 ated more cheaply from the larger, high efficiency machines.
18 It is, therefore, essential that Utilities in Nova Scotia
19 design and operate to take advantage of all factors that
20 will bring about the cheapest generation. Normally
21 where thermal generation supplies the greater part of
22 power requirements, Utilities can best fulfill their
23 obligation in economic development if they are free to
24 use the cheapest fuel available.

25 However, in Nova Scotia the Federal Coal sub-
26 vention now tends to equalize the effect of fuel cost on
27 electric tariffs for some power customers.

28 The Company considers that it is essential that
29 proper tariff balances be maintained between all classes
30



1 of consumers. It is also essential to the growth of the
2 electric utility that electric energy be kept competitive
3 with alternative fuels for cooking, water heating, heat
4 processes, etc.

5 FUTURE ALTERNATIVE SOURCES OF POWER

6 It would be incorrect at this time to plan that
7 future sources of power in the Maritimes will be mainly
8 thermal stations burning fossil fuels.

9 In the short-term outlook the Nova Scotia Power
10 Commission is completing a 25 megawatts hydro development
11 at Sissibou Falls. Nova Scotia Light and Power Company,
12 Limited is building two hydro plants at Alpena and
13 Lequille, Annapolis County, totalling 10 megawatts.

14 Investigation is being carried out by the Nova
15 Scotia Power Commission of a potential hydro site at
16 Wreck Cove, Cape Breton of approximately 75 megawatts.

17 The New Brunswick Electric Power Commission are
18 investigating further major developments on the Saint
19 John River.

20 A thermal power plant of 50 megawatts capacity
21 is being built by the New Brunswick Electric Power
22 Commission at Saint John, for operation in 1961. Nova
23 Scotia Light and Power Company, Limited is designing a
24 100 megawatt plant for installation at Tufts Cove for
25 operation in 1965 or 1966.

26 In the long-term outlook, although further
27 thermal extensions will be necessary to integrate
28 efficiently the various sources of energy, there are
29 several additional major sources of power which require
30 consideration. The following are brief comments on



1 these sources:

2 (1) Hamilton River.

3 British Newfoundland Development Corporation,
4 a Company interested in power development in Canada,
5 has stated to the Power Committee of the Atlantic Provinces
6 Economic Council, that electric energy can be delivered
7 from Hamilton River in Labrador to the Moncton - Amherst
8 area, for 7 mills per kilowatt hour. This price is based
9 upon energy being taken at a minimum of 100 megawatts
10 demand at 100% load factor. It will be several years
11 before loads on the Maritime grid will provide a demand
12 and load factor suitable for the acceptance of this
13 amount of power under these conditions. Until this
14 amount of power becomes a smaller percentage of the total
15 capacity on the Interprovincial Interconnection, service
16 reliability of a single transmission line from Hamilton
17 River would be a problem. However, the prospect of
18 having available such a large quantity of 7 mill power,
19 is pertinent when forecasting coal consumption by thermal
20 plants within the Atlantic Power Pool.

21 (2) The Saint John River.

22 Potential sites on the Saint John River offer
23 very real possibilities for adding large new generating
24 capacity to the Atlantic Power Pool. These developments
25 have the advantage over tidal power projects in that they
26 can be developed consecutively, and therefore, more in
27 keeping with growth of demand on the Interconnection.
28 Total development of the River is International, the
29 Rankine Rapids section being in the State of Maine.
30



1 On the New Brunswick reach of the River the four
2 potential sites have a potential combined capacity of
3 approximately 800,000 horsepower and the Rankine Rapids
4 development in Maine is rated at 620,000 horsepower.
5 These five plants would produce over a half-billion
6 kilowatt hours per year on a 50% load factor basis.
7 The first of this capacity will, in all probability, be
8 additions to the present Beechwood plant totalling
9 90,000 horsepower, (the first 30,000 horse-power of which
10 is in prospect for 1962). The next addition will in
11 all probability be at Grand Falls where the new potential
12 is 245,000 horsepower.

13 (3) Atomic Power

14 The development of electric power generation
15 from nuclear fuelled stations is considered today to
16 depend upon slow methodical progress toward units which
17 will be more commercially competitive with conventional
18 plants burning fossil fuels. There is at present, no
19 indication of a sudden break-through to improve the
20 techniques or processes, which would render nuclear
21 generation significant within the next ten years in the
22 Maritimes. While this may seem contradictory to the very
23 extensive reactor developments which are taking place
24 all over the world, it should be noted that coincident
25 with the development of atomic plants, there have been
26 very appreciable improvements in the conventional steam
27 turbine cycle, which have tended to maintain overall
28 lower costs.

29 As the system load grows, atomic energy will
30



1 become more and more competitive and probably within the
2 next ten to fifteen years will be in a position to
3 challenge coal and oil as an energy source for future
4 generation.

5 (4) Tidal Power

6 Foundation of Canada Engineering Corporation
7 Limited has carried out a study of tides in the Bay of
8 Fundy, and on the basis of findings has stated that
9 power can be developed in the Shepody Basin to the
10 extent of 245 megawatts and capable of producing 3.76
11 billion kilowatt hours at a price of 6.72 mills per
12 kilowatt hour; the fixed charges being computed with
13 interest at 6.0 per cent. Further investigation is
14 required to prove the economics of this project. Although
15 the estimated load of the Power Pool is not large enough
16 to absorb the units of energy required to render this
17 very large development immediately feasible, it must be
18 considered in long-range planning. It is also pertinent
19 when forecasting coal consumption by thermal plants
20 within the Atlantic Power Pool.

21 (5) Research on Thermal Plants

22 Major research continues to be carried out with
23 respect to fossil fuel burning, and if the trend of
24 improvement continues, thermal plants using fossil
25 fuel will maintain their competitive position.

26 An unusual research programme is being carried
27 out in what is called magnetohydrodynamics. Ten power
28 companies of the United States have joined in this
29 research project, which offers the possibility of a 25
30 per cent increase in operating efficiency. This group



1 are exploring the feasibility of obtaining electric
2 power from a "hot gas" or a magnetohydrodynamic generator.
3 This is but one of the new research programmes on thermal
4 generation.

5 Further research may also be done with the
6 burning of coal underground.

7
8 DESCRIPTION OF COMPANY AND GENERATING FACILITIES

9 Nova Scotia Light and Power Company, Limited
10 and its wholly-owned subsidiary companies supply electric
11 service in the central, western and northern sections of
12 the Province of Nova Scotia. Its subsidiary companies;
13 Western Nova Scotia Electric Company, Limited, Milton
14 Hydro Electric Company, Limited and The Edison Electric
15 Light and Power Company, Limited of Springhill, supply
16 electric requirements in Barrington and Yarmouth,
17 Brooklyn and Milton, Oxford and Springhill, and neigh-
18 bouring areas respectively.

19 The areas served by Nova Scotia Light and Power
20 Company Limited and its subsidiaries, have a combined
21 total population of more than 300,000. The total number
22 of customers served exceeds 90,000 which is about one-
23 half the electric consumers in the Province.

24 The Company's generating facilities consist of
25 a modern thermal-electric plant at Halifax, a number of
26 hydro electric generating stations in the Annapolis
27 Valley and a diesel plant in Yarmouth. The total capacity
28 of the generating system is 206,757 kilowatts (name
29 plate rating).
30



1 In addition the Company purchases the following
2 approximate amounts of power: From the Nova Scotia
3 Power Commission 7,000 kilowatts at Halifax, 5,000
4 kilowatts at Yarmouth, 3,000 at Onslow, and 850 at
5 Milton. It also purchases 3,200 kilowatts at Springhill
6 from the Canada Electric Company, Interconnections are
7 maintained at the Western End of the Province with The
8 Nova Scotia Power Commission's Western Network and
9 with Minas Basin Pulp and Power Company, Limited St.
10 Croix System.

11 In 1958 gross production of electricity totalled
12 645,714,756 kilowatt hours, compared with a total of
13 627,073,496 kilowatt hours in 1957. Of this total
14 366,176,600 kilowatt hours, or 57 per cent of the power
15 requirements of the Company was produced by thermal
16 generation. The 1959 peak load on the Company's integ-
17 rated system was 133,400 kilowatts.

18 In keeping with the sustained long-term growth
19 of demand for electric energy, considerable additions
20 have been made to the system's generating, transmission
21 and distribution facilities in recent years. A programme
22 of further development is now in progress. On October
23 30, 1959 the Company commissioned a 45,000 kilowatt
24 addition to its thermal generating facilities at Water
25 Street. I might say here, sir, should you or any member
26 of your staff wish to visit that station to see the
27 equipment that we have for coal burning, we would be
28 only too pleased to arrange such a visit. Hydro electric
29 sites will be developed at Lequille and Alpena in the
30



1 1962-63 period, to add approximately 10,000 kilowatts to
2 the hydro generating facilities in the Annapolis Valley.

3 Forward planning also includes the possible
4 installation of a 25,000 - 30,000 kilowatt distillate
5 oil fired gas turbine at the new plant site at Tufts
6 Cove on Halifax Harbour, to be ready for operation in
7 in the Fall of 1963. This unit will be for peak load
8 purposes, and its probable annual use will not exceed
9 600 hours. More definite scheduling of this unit will
10 depend upon the capacity available for purchase from the
11 Interprovincial Interconnection, the possible development
12 of hydro at Wreck Cove by The Nova Scotia Power Commission
13 and future developments on the Saint John River.

14 The copy of the Company's load duration curve
15 for the year 1958 as in Appendix "A" is typical of the
16 Interprovincial system load.

17 The next major addition to generation by this
18 Company will be a new thermal generating station to be
19 erected at Tufts Cove, the first unit to be of 100,000
20 kilowatt capacity, for operation in 1965-66. This site
21 provides for an ultimate development of 500,000 kilowatts.

22 There follows existing thermal capacity at the
23 Water Street Plant, and the actual thermal generation
24 for the years 1949 to 1958, and a table on page 12 for
25 projected thermal generation where it shows in 1959,
26 according to the figures available when the brief was
27 made, the equivalent tons of coal used were 203,179,
28 and our production forecast for the year 1969 for the
29 equivalent tons of coal used is 678,000.
30



EXISTING THERMAL CAPACITY - WATER STREET PLANT

<u>Unit No.</u>	<u>Manufacturer</u>	<u>Continuous rating</u>
2	C.A. Parsons	12,500 kw
3	C.A. Parsons	20,000 kw
4	Metropolitan - Vickers	20,000 kw
5	Metropolitan - Vickers	25,000 kw
6	English Electric	45,000 kw
7	English Electric	45,000 kw

ACTUAL THERMAL GENERATION

The following tabulation shows the gross generation by thermal units for the past ten years, also the equivalent tons of 13,000 B.T.U. (British Thermal Unit) coal assuming that coal was the only fuel used.

<u>YEAR</u>	<u>MILLIONS OF KWH</u>	<u>EQUIVALENT TONS OF COAL USED</u>
1949	100.5	84275
1950	118.8	94219
1951	113.9	78120
1952	165.9	93450
1953	203.1	115194
1954	221.6	120044
1955	306.2	161900
1956	326.2	172300
1957	425.5 ^x	219291
1958	366.1	183339

x - abnormally low water year



PROJECTED THERMAL GENERATION

The following table shows the projected thermal generation for the next ten years, also the equivalent tons of 13,000 B.T.U. coal required to produce this energy, if coal only is used.

YEAR	MILLIONS OF KWH	EQUIVALENT TONS OF COAL USED
1959	420	203,179
1960	556	268,000
1961	628	303,500
1962	688	333,000
1963	776	375,000
1964	852	412,500
1965	958	463,000
1966	1070	509,000
1967	1203	582,000
1968	1344	650,000
1969	1399	678,000

During the year 1958, Nova Scotia Light and Power Company, Limited used as fuel, the equivalent of 183,339 tons of Nova Scotia slack coal in its Water Street Thermal Plant of which 158,000 tons was Nova Scotia Slack Coal and the remainder Bunker "C" oil. Of the coal used approximately 88,000 tons were purchased from the Dominion Coal Company Limited.

The remainder was supplied by the Evans Coal Company of Inverness, Cape Breton; Doucet & Sons, Inverness, Cape Breton; Bras d'Or Coal Company Limited, Sydney Mines; Indian Cove Coal Company, Sydney Mines, and the Cumberland Fuel & Trading Company of River Hebert.



COAL ANALYSIS

A typical proximate analysis showing the four main characteristics of these coals follows:

	<u>Dominion</u>	<u>Bras d'Or</u>	<u>Doucet</u>	<u>Evans</u>	<u>Cumberland</u>
Moisture	4.11%	4.83	10.81	6.37	2.55
Ash	7.39%	10.30	14.67	10.64	18.25
Sulphur	3.38%	5.9	5.6	5.44	4.46
B.T.U.	13,390	12,310	9,938	11,790	11,670

These typical analyses do not fully indicate the variations in the quality of the coal that have been experienced, as indicated by the following tables:

It shows, for instance, where Dominion Coal has had a variation in moisture content from 3.1% to 5.7%; in ash, from 3.7% to 15.7%; the sulphur content remains constant, but the calorific content varies from 13,970 to 11,410. Similar variations are shown in the table for the other producers.

	<u>Dominion</u>	<u>Bras d'Or</u>	<u>Doucet</u>	<u>Evans</u>	<u>Cumberland</u>
Moisture	3.1	5.77	13.42	10.71	2.93
Ash	3.7	12.82	11.14	10.3	22.5
Sulphur	2.0	5.96	5.5	5.5	4.8
B.T.U.	13,970	11,810	10,330	11,320	10,850
Moisture	5.7	5.91	14.99	8.55	3.96
Ash	15.7	9.58	14.53	10.78	20.95
Sulphur	2.0	5.57	5.49	5.48	4.34
B.T.U.	11,410	12,430	9,520	11,490	11,040

All coal purchased from the Dominion Coal Company Limited since January 1, 1959 costs Nova Scotia Light and Power Company, Limited, \$11.615/Short Ton plant



siding Halifax, or 43.02¢ per million B.T.U.'s. This price includes \$2.355/ton railway freight between Sydney and Halifax. In addition, there is a top wharfage charge of 8.8¢ per ton on the first 100,000 tons and 4.4¢ per ton on all excess in any one calendar year.

Coal supplied by the Dominion Coal Company, Limited costs the Nova Scotia Light and Power Company, Limited \$11.615/ton in 1938 (the same coal cost the Company \$4.85 a ton) (including freight) regardless of quality, except that if the B.T.U. content varies more than 1% plus or minus from the guaranteed B.T.U. of 13,500/lb. (as received basis) then a bonus or penalty is applicable at the prevailing rate of 43.02¢ per million B.T.U. Dominion Coal Company Limited will not agree to a penalty or bonus for moisture, ash or sulphur content of their coal regardless of quality.

For all other suppliers of coal to the Company's plant, none of whom is capable of filling the total requirements, a bonus-penalty method of purchasing is used. This method was developed and used by the Northern Indiana Public Service Company and complete details were given in a paper which was read before the American Society of Mechanical Engineers at their annual meeting in New York in December, 1957. A check of this method, by Company engineers, as it pertained to our Water Street plant, gave results so close to those contained in the release, that it was considered the most equitable method of purchasing coal. This method was adopted for the small suppliers, because the quality of their coal for



1 thermal generation was considerably below that of
2 Dominion Coal Company Limited. This method takes into
3 consideration the four characteristics of coal; i.e.,
4 moisture, ash, sulphur and B.T.U. content, which can and
5 do vary over a wide range, and have a very definite
6 effect on the useability of the coal. All four charact-
7 eristics directly affect the net cost of production of
8 electricity. True production cost decreases with
9 increased B.T.U./lb. and increases with increased amounts
10 of moisture, ash and sulphur present in the coal. Unless
11 adjusted by a bonus-penalty contract, the cost of coal
12 can not be properly made to reflect the increased or
13 decreased costs within the plant resulting from more or
14 less moisutre, ash and sulphur, so that the true value
15 of the coal may be obtained.

16 Such adjustments can be applied as a bonus for
17 better quality coal, or as a penalty for poorer quality
18 coal than the standard guaranteed by the supplier. The
19 whole purpose of this formula is to provide a fair basis
20 for value received.

21 Dominion Coal Company, Limited refused to sell
22 coal on this basis, and as a result, the Company is
23 forced to buy coal at a fixed price per ton, regardless
24 of quality, except for the one concession referred to
25 previously.

26 Coal from the smaller suppliers is usually of
27 poorer quality than Dominion Coal, but they have accepted
28 this method in selling their slack coal to the Company.
29 For the penalty - bonus feature, their coal is equated
30 to Dominion Coal.



Apart from the actual cost difference between coals, many difficult operating problems occur unless a relatively consistent grade of coal is supplied to the Company's boilers. These problems are at times so great that they would have more influence on determining coal supply than invoiced price.

A copy of the method of adjusting the cost of the coal supplied monthly by one of the smaller suppliers is attached as appendix "B".

DESCRIPTION OF BOILER PLANT

The steam generating facilities of the Water Street Plant consists of seven boilers having the following capacity ratings:

Year Inst.	<u>Pulverized fuel fired boilers with Steam conditions 615psig 815° F.</u>	
1944	1-	110,000 pounds/hr.
1951	2	170,000 pounds/hr.
1953	1	220,000 pounds/hr.
1955	1	300,000 pounds/hr. 970,000 pounds per hour,
	<u>Cyclone fired boilers with steam Conditions - 925psig, 915° F.</u>	
1957	1	450,000 pounds/hr.
1959	1	450,000 pounds/hr. 900,000 pounds per hour.
Combined capacity of 7 boilers		1,870,000 pounds per hour.

The combination of these boilers, designed for two distinctive methods of firing, will successfully burn almost any of the Nova Scotia coals. However, inconsistencies in the coal supplied can lead to abnormal operating conditions, resulting in conveying, crushing and pulveriz



1 ing difficulties, boiler slagging, corrosion, plugging
2 of air heaters and excessive carry-over of dust particles,
3 and smoke which add to air pollution problems.

4 Nova Scotia coal is relatively high in volatile
5 matter, and has low ash softening temperatures and other
6 characteristics which make it well suited for cyclone
7 firing. However, for pulverized fuel firing, although
8 the coal is high in volatile matter and burns with a
9 short stable flame, it requires a large furnace design to
10 prevent an excessive build up of slag in the lower part
11 of the furnace, and on the boiler tubes.

12 With the completion of the installation of two
13 cyclone type boilers in the Water Street plant and their
14 correspondingly greater output of K.W.H., the consist-
15 ency of the quality of the coal is of increasing import-
16 ance. In these boilers, the ash is reduced to a molten
17 state, and tapped off into a vat of water where it solid-
18 ifies and fractures. These furnaces will operate satis-
19 factorily with coal which has the fusion point of the
20 ash below 2250 - 2300⁰ F. The average fusion point of the
21 ash in Cape Breton coals is normally around 1900-2000⁰F.
22 which is well below that required for satisfactory oper-
23 ation in these furnaces. If the ash fusion temperature
24 rises above these values, then the ash does not melt
25 and the furnaces do not operate satisfactorily. Coals
26 with ash fusion temperature around 2500⁰F. have been
27 delivered and operating problems have occurred. Tracing
28 back to the source we found that the ash content of the
29 coal fines from this mine was attributed to the way in
30 which the mechanical miner was used. During the course



1 of its cutting operation it apparently was scraping
2 the pavement of the coal seam. As there seemed to be
3 no way of eliminating this rock from the dry fines being
4 supplied to the Water Street plant it was necessary to
5 discontinue purchasing coal from this particular mine.

6 The projected thermal generation during the next
7 ten years calls for steadily rising fuel consumption
8 and in 1969 would reach 678,000 tons annually, and the
9 Company is concerned with the cost of producing electric
10 energy with this type of fuel both as to present cost
11 and the future rising cost.

12 COMPARATIVE COST: NOVA SCOTIA COAL, AMERICAN COAL, AND
13 BUNKER "C" OIL

14 American coal of 11,000 to 12,000 B.T.U. content,
15 a quality suitable for burning in company boilers, is
16 delivered to thermal plants in the Pennsylvania area for
17 costs ranging from 11.7¢ to 30.0¢ per million B.T.U. for
18 this quality coal.

19 Ocean freight on bulk shipments has been quoted
20 to this Company as costing between \$1.50 and \$1.60 per
21 ton on empty bottoms returning to Halifax. This same
22 fuel could, therefore, be landed in Halifax at a price
23 range of 19.6¢ to 36.8¢ per million B.T.U.'s.

24 Exhibit (1) "Steam - Electric Plant Factors 1958"
25 an annual study by the Department of Coal Economics tab-
26 ulates the cost of all classes of fuel at thermal gener-
27 ating stations throughout the U.S.A. Further, the
28 Company has received a quotation of 36.5¢ per million
29 B.T.U., f.o.b. Halifax for high quality Pennsylvania
30 coal.



In 1958 the actual net savings to the Company were investigated on the basis of using only Bunker "C" oil as a fuel in both the pulverized fuel plant and in the cyclone type boilers. Based on the investigation, a comparison of the cost of coal vs. oil in the pulverized fuel plant and the cyclone fired boiler the result is as follows: (In making these comparisons invoice costs in both cases were weighted to include costs of handling and processing).

	<u>Pulverized Boilers</u>	<u>Cyclone Boilers</u>
Coal	44.42	43.67
Oil	<u>37.55</u>	<u>36.85</u>
Saving using oil as fuel per million B.T.U.'s	<u>6.87¢</u>	<u>6.82¢</u>

Using 1959 prices for coal and oil but retaining the same quantities as used in the 1958 study the comparison in saving would be as follows:

Coal	45.04	44.29
Oil	<u>36.67</u>	<u>35.97</u>
Saving using oil as fuel per million B.T.U.'s	<u>8.37¢</u>	<u>8.32¢</u>

Copies of the sheets showing the method of arriving at these figures are attached as Appendix "C".

These figures compare only the relative differences in cost of purchasing, handling and preparation of the alternative fuels including the cost of ash disposal. Other factors have a direct bearing on final fuel cost but have not been taken into account in the foregoing comparison. These include boiler room labour, cost of ash collectors and ash removal, cost of equipment



1 for coal handling, and crushing, cost of maintenance of
2 all this equipment. The cost of land for storage is less
3 for oil than for coal. In addition, the use of oil per-
4 mits greater flexibility of operation. Therefore,
5 comparative costs of fuels is determined finally by a
6 common denominator "the cost per unit of developed energy."
7 All of these items must be carefully considered in the
8 design of new plant.

9 Due to land restrictions at Water Street site
10 there is not sufficient room for storage of coal supplies
11 to protect plant reliability of service for more than
12 eight days' operation. The main fuel storage to protect
13 plant reliability is in Bunker "C" oil tanks. Because
14 of the smaller bulk per heat unit of oil a larger storage
15 can be maintained on the same land area. Because a
16 residual oil is used, certain quantities must be burned
17 so that the oil handling and burning equipment can be
18 kept ready for immediate use.

19 Bunker "C" oil used in the plant is supplied from
20 the Imperial Oil Refinery across the harbour. It is
21 pumped into the two oil storage tanks of 18,000 and 12,000
22 barrel capacity and flows from these tanks by gravity
23 feed to the boiler oil pumps.

24 The present day cost of Bunker "C" fuel oil at
25 the Company's Halifax wharf is \$2.2485 per barrel of
26 34.97 imperial gallons. The B.T.U. content of this oil
27 averages 18,400 B.T.U./lb. On this basis one pound of
28 oil has the same number of heat units as 1.36 pounds of
29 Dominion coal. On a tonnage basis the present day cost
30 of Bunker "C" oil is equivalent to coal supplied at the



1 plant for \$9.50 per ton instead of \$11.70 per ton.

2 This amounts to a direct saving of \$2.20 for each
3 equivalent ton of Dominion coal used and on the basis
4 of the 1958 usage would amount to \$325,000. Should
5 present costs of oil and coal remain stable, the saving
6 in 1969 could be \$1,500,000. This is increment cost only
7 and does not take into account the cost of personnel to
8 handle the fuel, the maintenance and operation of the coal
9 equipment and ash disposal, and the other items previously
10 mentioned.

11 If, in the Halifax area, the present price of
12 Bunker "C", or higher viscosity oil pitch, remains below
13 that of coal the use of these oil fuels would decrease the
14 production costs of electricity about 1 to 1.4 mills per
15 kilowatt hour, or between 15 - 20 per cent. This effect
16 on production costs is shown by a recent survey of
17 thermal generating stations in the United States. This
18 survey found that fuel costs averaged 42% of the total
19 cost of energy produced by the individual steam stations
20 which reported. On this basis alone, a very substantial
21 saving could be realized by installing the first boiler
22 unit at Tufts Cove for oil firing.

23 The capital cost of the boiler plant for the
24 first proposed unit at Tufts Cove designed and equipped
25 for coal firing will be \$3,900,000. If this boiler is
26 designed and equipped for oil firing it will cost
27 \$2,350,000. Of this amount \$800,000 is in boiler and
28 \$750,000 in coal and ash handling equipment.

29 The 11th Steam Station Cost Survey, as published
30 in the October, 1959 issue of Electrical World, shows an



1 average station cost of \$115 per KW for oil and/or gas
2 fired stations in the 100-150 megawatt range. The cost
3 for coal fired stations is \$155 per KW. These costs
4 are typical of other recent similar surveys. Boiler
5 equipment for oil or gas fired plants uses 36.4% of
6 the plant construction dollars while coal fired plants
7 use 40.6%. These statistics show that, on the average,
8 a lower capital investment is required for the oil fired
9 station.

10 Coals vary greatly in their B.T.U. value, sulphur
11 content, ash content and in the fusion temperature of the
12 ash. These four factors are the main determinants in
13 the design of a coal burning boiler.

14 The heating value or B.T.U. content of a coal
15 affects the design of boiler plant in the sizing of the
16 coal handling equipment as well as in the amount of heat
17 absorbing surface required in the furnace. The sulphur
18 content affects the design mainly by governing the minimum
19 exit gas temperature leaving the unit which, in turn,
20 directly affects efficiency. High sulphur content in-
21 creases the rate of fouling of the gas passages resulting
22 in higher cleaning costs. Ash content affects the design
23 of the boiler furnace and gas passes in respect to their
24 sizing. It also affects hoppers, ash collecting and
25 removal equipment. Fusion temperature of the ash affects
26 the design in that the heat input to the furnace and
27 the absorption of furnace walls must be so proportioned
28 that combustion is completed before the gases leave the
29 furnace, and the gas temperature must always be suffic-
30 iently below the fusion point of the ash to prevent



1 clogging.

2 COAL SUBVENTIONS

3 By virtue of the Atlantic Provinces Power
4 Development Act, the Minister of Northern Affairs and
5 National Resources was authorized, with the approval of
6 the Governor-in-Council, on behalf of the Government of
7 Canada, to enter into an agreement with the Government
8 of any of the Atlantic Provinces to provide assistance
9 to the Province in the generation of electric energy
10 as provided by said Act.

11 In an agreement, effective for five years from
12 December 1, 1957, made with the Province of Nova Scotia,
13 the Dominion Coal Board, on behalf of the Government
14 of Canada, pays to the Government of Nova Scotia, a
15 subvention of 7.43 cents per million B.T.U.'s on coal
16 used for the generation of electricity in Nova Scotia.

17 From the money received the Province of Nova
18 Scotia pays subventions to certain power consumers of
19 all utilities who generate in thermal plants. The amount
20 of subvention is based on the amount of thermal generation
21 from coal by the supplying utility, as well as the cost
22 of coal to the particular supply utility.

23 The subventions do tend to equalize the affect of
24 fuel cost on the electric tariffs for those power cust-
25 omers who receive subventions.

26 Appendix "D" contains a description of the dis-
27 tribution of coal subventions in Nova Scotia, method of
28 apportionment and classification of industrial customers
29 entitled to receive this subvention, all as prepared by
30



1 The Nova Scotia Power Commission.

2 In addition to the amounts paid directly to
3 power customers, a portion of the Federal subvention
4 payments is set aside in a reserve fund to further
5 subsidize present or future industries of a type where
6 cost of power represents a significant percentage of
7 finished product cost. The Company considers this res-
8 erve fund as most important because it could provide the
9 means to attract new industries to Nova Scotia.

10 No subvention is paid to domestic or commercial
11 users. No subvention is paid to the generating utility.
12 Therefore, the subventions do not in any way reduce
13 electric tariffs to all consumers, nor do they alter the
14 position of the generating utility which finds that oil
15 is the cheaper fuel for its general operations.

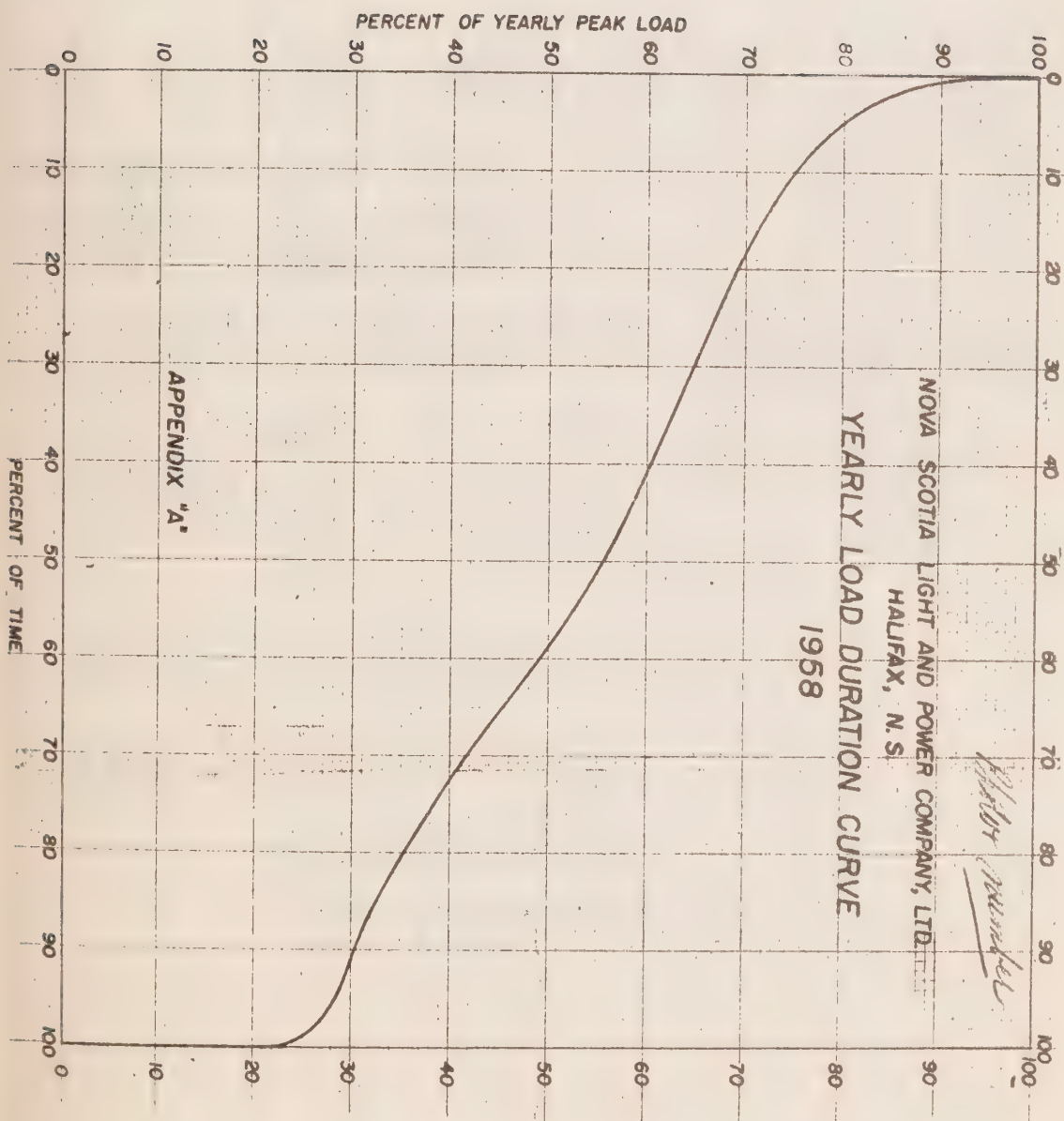
16 Exhibit 2 is submitted which is a tabulation
17 prepared by the Edison Electric Institute showing
18 electric energy costs as a percentage of production
19 costs for various industries. This tabulation will show
20 that for most industries electricity represents less than
21 one per cent of production cost. Industries that really
22 need particular help in making electricity competitive
23 compared to other regions are those in which electricity
24 represents more than three per cent of their production
25 costs.

26 The payment of Federal subventions to Nova
27 Scotia is a direct benefit to the economy of the
28 Province.

29 In Nova Scotia the distribution of the subventions
30



1 to power users is proceeding in an orderly fashion.
2 The formula now being used to determine the amount of
3 subvention to power users in Nova Scotia is one that
4 can be readily altered to meet either the changes in
5 policy that may come with additional experience or the
6 requirements of changing conditions.





APPENDIX "B"

NOVA SCOTIA LIGHT AND POWER COMPANY, LIMITED

COAL ADJUSTMENT CALCULATION

Month of November, 1959

S. J. Doucet & Sons Ltd.,
Inverness,
N.S.

	Guarantee Analysis Dominion	As Received Analysis	Difference Per Cent	Adjustment B.T.U. per 1% Note - (a)	Adjustment Amount in B.T.U.'s Note - (b)
Moisture	3.5	14.99	11.49	60	689
Ash	8.5	14.53	6.03	80	482
Sulphur	3.5	5.49	1.99	100	199
B.T.U.	13,500	9,520			

Delivered Price, Guarantee Analysis:	As Received B.T.U.	9,520
\$43.02 cents per Million B.T.U.'s	Adjustment B.T.U.	1,370
	Adjusted B.T.U.	8,150

Invoiced Price,	F.O.B Shipping Point	4.97
Freight		2.355
Delivered Price,		7.325
Adjusted Price	(8150 x 2000 x 43.02)	7.012
	Difference	.313

Tons Received,	699.98 tons
Adjustment	699.98 x .313 = \$219.09 penalty

NOTE:

- (a) If difference is less than 0.5% for any one factor, adjustment will be zero.
- (b) If net difference from guaranteed analysis is less than 100 B.T.U.'s adjustment will be zero.



APPENDIX "C"

Sheet 1.

To calculate the Unit Cost of unloading, crushing and conveying coal from railway cars to Bunkers. This includes the cost of labour, power and lighting.

In arriving at this figure the 12 months September 1957 to September 1958 were used.

The total equivalent tons of coal handled = 195,510 tons

The cost of labour for handling (8 men) \$25 260 00

Estimated cost of replacement parts of crusher and for lubricants and miscellaneous expenses 2 000 00

Cost of power for handling 368,420 KWH at .7 2 580 00

Lighting conveying plant 500 00

Total charges \$30 340 00

Cost per million B.T.U.'s of fuel used based on average Dominion Coal @ 13,120 B.T.U. per lb. as received (5,103,000 per million B.T.U.'s for the year)..... .594



APPENDIX "C"

Sheet 2.

Pulverizing Cost

Assumed an average of 26 KWH per ton based on
B. & W.'s performance figures and spot check on
#3A Boiler by Nova Scotia Light and Power Company,
Limited

Cost of pulverizing per million B.T.U.'s..... .73¢

Ash Handling Cost

Cost of labour for ash handling and disposal
on basis of eliminating use of one auxiliary
attendant per shift

\$275.00 per mo. x 12 x 3 = \$9,900.00

Cost per ton for this labour 5¢ per ton

Labour cost per million B.T.U.'s..... .2¢

Cost of hauling ash on basis of actual total
trucking cost for the 12 months

Sydney Coal 173,030 tons

4,540,000 million B.T.U.'s

Total trucking cost \$18,636.80

Cost of ash removal per million B.T.U.'s..... .4¢

Power for ash conveyors

Roots Blower, Unloaders, etc.1¢

Total ash handling cost per million B.T.U.'s7¢



APPENDIX "C"

Sheet 3.

Cost of Burning Pulverized Coal

	1958 Base Prices	1959 Base Prices
Base purchase price of coal per million B.T.U.'s	42.40¢	43.02¢
Cost of power and labour for handling.....	.59	.59
Cost of pulverizing.....	.73	.73
Cost of ash handling and disposal.....	<u>.70</u>	<u>.70</u>
Total cost of burning pulverized coal per million B.T.U.'s	<u>44.42¢</u>	<u>45.04¢</u>

Cost of Burning Coal in Cyclones

Base purchase price per million B.T.U.'s	42.40¢	43.02¢
Cost of power and labour handling.....	.585	.585
Cost of power for slag removal, pumping water, drag feeders.....	.085	.085
Cost of removal from boiler and hauling ash away	.6	.6
Total cost of burning coal in cyclones per million B.T.U.'s	<u>43.67¢</u>	<u>44.29¢</u>



APPENDIX "C"

Sheet 4

1			
2	<u>Base Price of Oil (Bunker "C")</u>		
3		<u>1958</u>	<u>1959</u>
4	Base price of oil per barrel	\$ 2.304	\$2.2485
5	Taking value of 18,400 B.T.U. per lb.		
6	S.G. .98 gallons per barrel 34.97		
7	Base price of oil per million B.T.U.'s	36.54¢	35.66¢
8	<u>Cost of Burning Oil in Pulverized Boilers</u>		
9	Base price of oil per million B.T.U.'s	36.54	35.66
10	B. & W.'s figure for atomizing steam is given as .7% of steam output, this figure is indicated by measurements taken during actual operation as being about 1% in lbs. per hour of steam at 150 psig, 450°F. This 1% is equivalent to approximately .9% of 600 psig, 800°F steam		
11		.7	.7
12	Tank and line heating and steam tracing based on an approximate measured quantity taken on Oct. 22 and adjusted to average yearly figure		
13		.1	.1
14	For heating oil at pumps, calculated on heat exchange at pumps.....		
15		.2	.2
16	Power for pumping oil based on actual measurements taken on Oct. 22, 2 pumps running to supply #3A, 3B and 6 boilers, 13 KW for 620,000 lbs. steam per hour charging energy at 7 mills per KWH		
17		.012	.012
18	Total cost of burning oil in pulverized boilers per million B.T.U.'s.	<u>37.55¢</u>	<u>36.67¢</u>
19			
20			
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APPENDIX "C"

Sheet 5.

Cost of Burning Oil in Cyclone Boilers

	<u>1958</u>	<u>1959</u>
Base price of oil per million B.T.U.'s.....	36.54¢	35.66¢
Tank and Line Heating per million B.T.U.'s.....	.1	.1
Heating oil at pumps per million B.T.U.'s.....	.2	.2
Power for pumping oil per million B.T.U.'s.....	<u>.01</u>	<u>.01</u>
Cost of burning oil in Cyclone Boilers per million B.T.U.'s	<u>36.85¢</u>	<u>35.97¢</u>

Comparison of oil vs. coal (1958 Base Prices)

	<u>Pulverized Boilers</u>	<u>Cyclone Boilers</u>
Coal	44.42	43.67
Oil	<u>37.55</u>	<u>36.85</u>
Difference per million B.T.U.'s	<u>6.87¢</u>	<u>6.82¢</u>

Using 1959 prices for coal and oil but retaining the same quantities as used in the 1958 study, the comparison in saving would be as follows:

	<u>Pulverized Boilers</u>	<u>Cyclone Boilers</u>
Coal	45.04	44.29
Oil	<u>36.67</u>	<u>35.97</u>
Difference per million B.T.U.'s	<u>8.37¢</u>	<u>8.32¢</u>



APPENDIX "D"

DISTRIBUTION OF COAL SUBVENTION - NOVA SCOTIA

DEFINITIONS

- "Commission" - The "Commission" means the Nova Scotia Power Commission.
- "Board" - The "Board" Means the Dominion Coal Board
- "Head Agreement" - The "Head Agreement" means the Agreement dated February 20, 1958 between the Government of Canada, and the Government of the Province of Nova Scotia.
- "Coal Agreement" - The "Coal Agreement" means the Agreement effective December 1, 1957 between the Dominion Coal Board and The Nova Scotia Power Commission.

WHEREAS by virtue of the Atlantic Provinces Power Development Act, the Minister of Northern Affairs and National Resources, was authorized with the approval of the Governor-in-Council, on behalf of the Government of Canada, to enter into an agreement with the Government of any of the Atlantic Provinces to provide assistance to the Province in the generation of electric energy as provided by said Act.

AND WHEREAS pursuant to said Act, the Head Agreement has been completed between the Government of Canada, and the Government of Nova Scotia, dated the 20th day of February A.D. 1958, whereby the Government of Nova Scotia under Section 2 agreed:-



- 1 (a) To confer upon The Nova Scotia Power
2 Commission such powers and authority as
3 it will require which it does not
4 already have to enable it to carry out
5 the agreements hereinafter described.
- 6 (b) To determine the basis of the distribution
7 and distribute the subvention paid from
8 time to time by Canada among consumers
9 of Eastern coal in thermal electric power
10 plants in the Province;
- 11 (c) To take such action as may be necessary
12 to ensure that the monies paid to the
13 consumers of Eastern coal in thermal
14 electric power plants in the Province of
15 Nova Scotia are taken into consideration
16 in the setting of the rates charged by
17 them from time to time for electric power
18 supplied to industry in accordance with
19 the purposes of this agreement and further
20 to ensure that it will be fairly distrib-
21 uted, it being understood that the primary
22 purpose of the coal subvention is to red-
23 uce the price of power where it will make
24 the greatest possible contribution to
25 economic growth;

26 AND WHEREAS under the terms of the said Atlantic
27 Province Power Development Act, the Board shall, on behalf
28 of the Government of Canada, administer any agreement made
29 under the Act to such extent as may be directed by the
30



Minister of Northern Affairs and National Resources.

AND WHEREAS pursuant to Sections 3 & 4 of the Head Agreement, and the Order-in-Council, of the Province of Nova Scotia dated the 23rd day of June A.D. 1958, the Commission and the Board, are executing the Coal Agreement whereby the Commission agrees among other things:

- (a) To secure certified monthly statements from each consumer of eastern coal in Nova Scotia, generating electricity for sale, or for their own use, stating the number of British Thermal Units that have been used in the production of electricity and to transmit a monthly summary to the Board.
- (b) To receive the subvention payable, as set out in the monthly statement, and certified by the Board.
- (c) To distribute the amounts paid, as provided by paragraphs (b) and (c) of Section 2 of the Head Agreement.
- (d) To submit to the Board at the end of each fiscal year a report which shall set out the generating agencies receiving the subventions, the amounts paid, the reduction in cost to each plant or system as a result of the subvention, and the action taken by the Province to reduce rates of power to industry.

It is recommended, therefore, that the follow-



ing method of distribution of the coal subvention be adopted, on the basis that it is the most equitable to all concerned, and that it falls within the provisions of the Atlantic Provinces Power Development Act, and both Agreements.

INDUSTRIAL PLANTS

The Industrial Plants in Nova Scotia who are consumers of eastern coal used for the generation of electricity shall receive in subvention an amount equal to the differential in cost per million B.T.U.'s between their own coal cost and the cost in Ontario which was in effect at the time the average subvention rate of 7.43¢ per million B.T.U.'s was established. Industrial Plants herein shall include plants owned by industry, where all or part of the generation is consumed by that industry. Where the total generation is not for industry, the amount of subvention referred to here shall only apply to that portion of the generation which goes to that industry. The remainder of the generation shall be dealt with in the following manner as outlined for Public Utilities.

PUBLIC UTILITIES

Public Utilities in Nova Scotia, who are consumers of eastern coal shall receive a subvention for distribution to their industrial customers on the following formula:-

- (a) First Step - A subvention on the same basis as that set out for Industrial Plants in the preceding paragraph, applicable to that portion of the Utilities'



1 generation only, which will be consumed
2 by industrial customers.

3 (b) Second Step - After the subventions paid
4 to Industrial Generating Plants, the
5 subventions outlined in (a) of this par-
6 agraph, and a reserve fund are deducted
7 the balance of the subvention is distrib-
8 uted among the utility operators in the
9 same ratio as their kilowatt hour sales to
10 industrial customers, bears to the total
11 sales for all utility operators to
12 industrial customers who receive subvent-
13 ions.

14 And for the purpose of this formula, industrial
15 customers of distributing utilities, shall be deemed to be
16 customers of the generating utility, from which the dis-
17 tributing utility purchases its energy.

18 Appendix "A" attached is a sample calculation
19 showing the distribution to Industries and Public Utilities
20 who are producers of coal generated electricity in Nova
21 Scotia. This calculation is based on 1956 energy figures
22 and coal statistics submitted by the operators for the
23 12 month period ending October 31, 1957. The KWH sales
24 shown include all sales to industrial and commercial
25 power, less sales to Federal Agencies, and to customers
26 of the Nova Scotia Light and Power Company, Limited
27 above 100,000 KWH consumption per year who would not be
28 classified as industrial. The customers below 100,000
29 KWH per annum who would not be classed as industrial are
30



1 not deleted. However, since it appears the energy
2 consumption for this group would be small, the effect
3 on calculations shown would be slight.

4 RESERVES

5 The reserve referred to in the preceding sec-
6 tion shall be maintained at 25% of the total subvention
7 payable to the Province of Nova Scotia, in any one year,
8 and shall be used as a rate stabilizing fund to offset
9 the reduction that any large industry might have on the
10 subvention already paid to existing customers.

11 DISTRIBUTION TO CUSTOMERS BY THE GENERATING UTILITY

12 In order to estimate the subvention payable
13 to eligible customers, generating companies will be
14 required to submit to The Nova Scotia Power Commission not
15 later than the end of February in each year their estimated
16 coal consumption in millions of B.T.U.'s for the twelve
17 month period commencing April 1st in that year, as well
18 as estimated KWH sales to industrial customers for the
19 same period. The KWH sales would include sales to ind-
20 ustrial customers served indirectly through other distrib-
21 uting utilities.

22 From the statistics received from all generat-
23 ing companies, the subvention per KWH payable to industr-
24 ial customers of utilities, and to generating industries
25 for that period can be calculated. In the case of the
26 utilities the subvention can then be applied as a credit
27 to all eligible customers by a reduction in their regular
28 billing. Payment to the industries will be made direct
29 by the Nova Scotia Power Commission on the basis of their
30



1 KWH generation for any month, following receipt of the
2 total subvention payment for that month from the Dominion
3 Coal Board.

4 The generating utilities will submit certified
5 claims each month to The Nova Scotia Power Commission
6 for the amounts paid to industrial customers in that
7 month by way of subventions. The utilities will be re-
8 imbursemented on receipt by The Nova Scotia Power Commission
9 of the total subvention payment for that month from the
10 Dominion Coal Board.

11 SUBMISSION OF SUBVENTION CLAIMS BY THE NOVA SCOTIA POWER
12 COMMISSION.

13 All generating utilities will be required to
14 submit certified monthly claims to The Nova Scotia Power
15 Commission, in the form and manner as set out in the
16 appendices forming part of the agreement with the Dominion
17 Coal Board. Assistance will be provided in compiling the
18 first set of these forms. The forms together with a
19 summary are then forwarded to the Dominion Coal Board by
20 The Nova Scotia Power Commission for certification and
21 payment.

22 CLASSIFICATION OF INDUSTRIAL CONSUMERS

23 It is recommended that the coal subvention
24 be applied to those industrial consumers of eastern coal
25 generated electricity, who are engaged in the manufact-
26 uring, converting or processing of goods and products,
27 from raw or other materials, and who fall within the
28 Power Classifications set out in the rate schedules of
29 the Utilities.
30



The following are the main groups who are included in the Power Classifications of the Utilities rate schedules, who do not come within the general definitions of industrial consumers, and who therefore would be excluded from subventions.

1. Service Stations and Garages, Tire retreaders and vulcanizing, machine shops.

2. Construction:-

(a) Buildings and structures

(b) Highways, bridges and street construction

(c) Bricklaying

(d) Carpentry work

(e) Concrete and cement work

(f) Electrical work

(g) Lathing, plastering and stucco

(h) Painting and decorating

(i) Plumbing, heating and air-conditioning

(j) Roofing

(k) Tiling: marble and terazzo

3. Transportation

(a) Air transport and airports

(b) Bus and coach transportation

(c) Steam railways, including express and telegraph service

(d) Urban and suburban transportation systems

(e) Taxi-cabs

(f) Truck transportation

(g) Water transportation

(h) Services incidental to transportation

(i) Services incidental to water transportation



1 4. Storage

2 (a) Grain elevators

3 (b) Storage and warehousing

4 5. Communication

5 (a) Radio broadcasting

6 (b) Telephone, telegraph

7 (c) Television broadcasting

8 6. Public Utility Operation

9 (a) Electric light and power

10 (b) Gas manufacturing and distribution

11 (c) Water and sanitary services

12 7. Wholesale and retail trade

13 8. Government services

14 (a) Provincial, federal and municipal operations

15 (b) Crown corporations

16 (c) Defense services, installations

17 9. Community, recreation, business and personal serv-
18 ices.

19 (a) Education: schools and colleges

20 (b) Health: hospitals, medical and dental services

21 (c) Churches

22 (d) Welfare institutions, recreational centres,
23 service and social clubs

24 (e) Theatres and theatrical services

25 (f) Accountancy, advertising, engineering, scientific
26 and legal services

27 (g) Insurance, Banks, Trust Companies & real estate
28 and Business Offices.

29 (h) Labour organizations and trade associations

30 (i) Barbering and hair-dressing



- 1 (j) Dyeing, cleaning and pressing
- 2 (k) Photography
- 3 (l) Hotels, motels and lodging houses.
- 4 (m) Laundries
- 5 (n) Restaurants, cafes and taverns .
- 6 (o) Undertaking
- 7 (p) Taverns

10 Halifax, N.S.
11 July 25, 1958
12 Atch.



1 SUBVENTION RATES

1959 ESTIMATE

2 SEABOARD $39.20 - 34.76 = 4.44 + 0.24 = 4.68¢/\text{million B.T.U.}$

3 Subvention = $4.68 \times 4,215,420 = 197,282$

4 Subsidy/KWH on all sales = $\frac{197,282}{286,900,000} = 0.6875 \text{ mills/KWH}$

5 CANADA ELECTRIC $46.71 - 34.76 = 11.95 + .24 = 12.19¢/\text{million B.T.U.}$

6 Subvention $12.19 \times 1,255,006 = 152,985$

7 Subsidy/KWH on all sales = $\frac{152,985}{57,872,000} = 2.2540 \text{ mills/KWH}$

8 N. S. POWER COMMISSION $48.08 - 34.76 = 13.32 + .24 = 13.56¢/\text{million B.T.U.}$

9 Subvention = $13.56 \times 1,700,000 = 230,520$

10 Subsidy/KWH on all sales = $\frac{230,520}{142,000,000} = 1.6234 \text{ mills/KWH}$

11 N. S. L. AND P. $42.92 - 34.76 = 8.19 + .24 = 8.43¢/\text{million B.T.U.}$

12 Subvention = $8.43 \times 5,310,000 = 442,323$

13 Subsidy/KWH on all sales = $\frac{442,323}{531,956,000} = 0.8315 \text{ mills/KWH}$

14 DISCO $36.02 - 34.76 = 1.26 + .24 = 1.50¢/\text{million B.T.U.}$

15 Subvention = $1.50 \times 1,620,000 = 24,300$

16 Subsidy on all sales = $\frac{24,300}{121,216,000} = 0.2005 \text{ mills/KWH}$

17 SIFTO SALT $23,980 \times 7.43¢ = \$1,781$ This amount is paid directly
18 to the Company.

21 Halifax, N. S.
December 1, 1958.



DISTRIBUTION OF COAL SUBVENTIONS 1959

Total Subvention to Nova Scotia = $7.43 \times 14,029,406 = \$1,042,385$

DISCO share $1.5 \times 1,620,000 = 24,300$

Sifto Salt share $7.43 \times 23,980 = 1,781$

DISCO share of Seaboard $0.6876 \times 135,000,000 = 92,826$

Remainder available for distribution 923,478

Coal Generated Industrial KWH

Seaboard Power Corp. 18,140,300 - 0.1267

Canada Electric Co. 27,445,480 - 0.1917

N. S. Power Commission 27,400,000 - 0.1914

N. S. Light and Power Co. 70,186,061 - 0.4902

Total 143,171,841 1.0000

	Industrial Credit	Reserve	Total	Subvention on Coal Gen. Ind. KWH (Mills)	Subvention on all Ind. KWH (Mills)
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18,140,300 x 0.6876	= 12,475	81,647	94,122	5.1886	5.1886
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27,445,480 x 2.2540	= 61,862	123,534	185,396	6.7551	6.7551
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27,400,000 x 1.6234/.75	= 59,307	123,341	182,648	6.6660	4.9995
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70,186,061 x 0.8315/.67	= <u>87,101</u>	<u>315,892</u>	<u>402,993</u>	5.7418	3.8470
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220,745 644,414 865,159

This distribution leaves 923,478 - 865,159 = \$58,319 in reserve.

Amount paid to N.B E.P.C. for industrial customers in New Brunswick who consume power generated in Nova Scotia by Canada Electric Company is -

$$7.43\phi \times 1,152,560 \times \frac{9.642,600}{63,983,000} = \underline{92,905.74}$$

$$\text{Then Canada Electric Subvention} = 185,396 - 12,906 = \frac{172,490}{27,445,480 - 1,299,000} = \frac{172,490}{26,146,480} =$$

6.5971 mills

December 1, 1958
Halifax, N.S.



1 I might state, if I may in respect to a question
2 that was asked the Premier concerning tax on oil, on
3 residual oil that this Company's position would be with
4 respect to such a tax that it would only encourage our
5 technical staff who must be highly motivated and with
6 initiative, to seek the best and most efficient means
7 of producing power.

8 With a tax on oil, they would seek to find other
9 means of developing power more cheaply. It would be
10 incomplete if there was a tax on oil because American
11 Coal can be landed at Halifax at exactly the same price
12 as the residual oils. It would be contradictory in
13 that it would be a case of only one method of producing
14 power; where there is the possibility, as mentioned in
15 the brief, of obtaining power either from hydro develop-
16 ment on the St. John River, hydro development on the
17 Hamilton River, which may come in the future, or
18 possibly Tidal Power Plants.

19 THE CHAIRMAN: Perhaps we had better adjourn
20 at this point. You will be able to return this afternoon?

21 MR. HARRINGTON: Yes sir.

22 ---whereupon the hearing adjourned at 1:20
23 p.m. to reconvene at 2:45.
24
25
26
27
28
29
30



-- on resuming at 2:45 p.m.

THE SECRETARY: Gentlemen, shall we come to order and resume please.

THE CHAIRMAN: I am sorry to delay you, Mr. Harrington.

MR. HARRINGTON: As far as the company's brief is concerned and the general feeling of the company with respect to this whole situation, I think it could be summed up by saying that the company appreciates the difficulties in the coal industry and realizes as a Corporate citizen it must give support to it.

It is a question of that support being within the scope of the Corporate citizen to give, and to what extent we should go in our own mind, and to what extent should be done by agents other than ourselves.

The thing we fear is putting too much responsibility on corporate citizens. For instance, in our own thermal division of our company, I as manager of the company must go through the superintendent of that division and press him and his staff for the most efficient generation of electricity that he can possibly produce. Then I have to go to him and say on the other hand that because of the coal situation in Cape Breton you must stop what you are doing and burn this coal at decreased efficiency because of the good of the Province, and I feel that hurts the utility industry.

THE CHAIRMAN: I suppose there is this to be said, that if there was a serious inroad on the coal contribution to the economy of the whole Province, it



1 would affect you, too.

2 MR. HARRINGTON: That is right, and it is
3 because of that recognition that we have, as I
4 have said, turned to coal, and we have done it at
5 greater cost, as I have mentioned here, to the tune of
6 \$325,000.00, and it is only when the support of the
7 economy upsets the production of the corporate citizen
8 who is supporting the economy, that I feel then we must
9 ask for some relief and a policy by some governmental
10 agency to get that. We will support that in the same
11 way if a government agency does it through our taxation,
12 and we feel it is fairer to do it by taxation than by
13 other means.

14 Another difficulty, if I may point this out,
15 that becomes very apparent in this type of thing - and
16 I think this affects the labour movement - it so happens
17 in our wage and labour policies within the company that
18 our linemen, for instance --

19 THE CHAIRMAN: Your what?

20 MR. HARRINGTON: Our first lineman is paid
21 twenty per cent less than a first class lineman working
22 for Eastern Power and Coal in Sydney. The reason for
23 that difference in payment is, I would suggest, because
24 of the largeness of our organization and the additional
25 hazard that our linemen have to meet in a more concent-
26 rated area. For that reason it would tend to make us
27 pay more for our linemen than the Eastern Light and Power.
28 But because the Eastern Light and Power employees are in
29 an area where general labour rates are higher than the
30 Halifax area, they are, because of market conditions,



1 forced to pay their linemen a rate comparable with the
2 labour market.

3 We have tried to get our wage policy in
4 line with the Halifax region policy, and to keep it below
5 the Canadian market, because it is our sincere feeling
6 that the Nova Scotia and Atlantic Provinces must keep
7 their general labour rates below the Canadian labour
8 market if they are going to attract industry and
9 accelerate the industrial and economic development of
10 the Province. We have steady employees in our company
11 working at wages less than comparable employees in the
12 mining areas, yet they are asked as employees of our
13 company to operate in a way that cuts down the company's
14 earnings, which it does to some extent, in a way, to
15 cut down the company's earnings for the benefit of a
16 group who are in a higher wage level, instead of motivating
17 groups to produce their best, which everybody should be
18 motivated to do.

19 THE CHAIRMAN: Your complaints against the coal
20 supply seem to me to be limited to the irregularity in
21 quality.

22 MR. HARRINGTON: There, sir, we would like to
23 make a real case. It is our feeling, and I must be
24 critical in this, it is our feeling----

25 THE CHAIRMAN: I would like to have you
26 perfectly frank.

27 MR. HARRINGTON: It is our feeling that the
28 coal producers are not recognizing that coal as it comes
29 from the ground is not a finished product, and that it
30



1 must have some treatment if it is going to be properly
2 marketed for consumption. It would be just the same as
3 a farmer sending dirty carrots into the market, compared
4 with a farmer sending washed carrots into the market.
5 There must be something done in their method of production
6 to get control, or some treatment after they bring it
7 up to the surface, to establish quality control.

8 THE CHAIRMAN: If the quality is uniform,
9 you can use it.

10 MR. HARRINGTON: That is right, with one
11 exception, sir. We have a great deal of difficulty in
12 burning Pictou County coal in our cyclone boilers, and
13 we have had to discontinue their use in this boiler
14 because of their ash fusion temperature.

15 THE CHAIRMAN: What is the temperature?

16 MR. HARRINGTON: Perhaps I can read from a
17 letter I have that was addressed to the company by the
18 manufacturers of the boiler. "This will confirm my
19 telephone call of such and such a date regarding the
20 coal you asked us to investigate for cyclone firing with
21 in this boiler" - where we dump the ash and draw it out
22 of the bottom of the furnace - "all of the coal, except
23 Pictou County coal is entirely satisfactory as explained."
24 They don't recommend Drummond and Acadia coal for cyclone
25 firing. In the analysis that they had accompanying the
26 letter, the fusion point of ash, for Acadia slack, the
27 initial deformation was 2270°F. and the fluid temperature
28 was 2730°F.

29 THE CHAIRMAN: Would you mind repeating those
30



1 temperatures?

2 MR. HARRINGTON: The initial deformation was--

3 THE CHAIRMAN: That is the deformation of the
4 ash?

5 MR. HARRINGTON: Yes, the deformation of the
6 ash.

7 THE CHAIRMAN: Yes.

8 MR. HARRINGTON: But for it to become fluid,
9 in order to run out of the bottom of the furnace, the
10 ash temperature on the Acadia slack sample was 2730°.

11 THE CHAIRMAN: Therefore you have a high
12 degree of fusion.

13 MR. HARRINGTON: That is right. At the same
14 time we sent a sample of Drummond, and the initial
15 deformation was 2740°, and the fluid temperature was
16 2800°.

17 THE CHAIRMAN: In some cases that would be
18 a recommendation.

19 MR. HARRINGTON: In the cyclone firing boiler,
20 yes.

21 THE CHAIRMAN: Would you mind explaining what
22 the cyclone furnace is?

23 MR. HARRINGTON: The cyclone firing boiler -
24 the basic difference between it and a normal boiler is,
25 in a normal boiler you try to build a boiler with temper-
26 atures inside the boiler below the ash fusion temperature,
27 so that the ash will not melt and cling to the walls of
28 the boiler. If it clings to the wall, you have a very
29 difficult cleaning problem, and it cuts down on your
30



1 efficiency. In the cyclone firing boiler, you try to
2 do the opposite. You burn your coal at a very high
3 temperature. The furnace coal burns between 3000 and
4 3600°F, to deliberately melt the ash. It consolidates
5 the ash. It is more efficient in this, that you have a
6 smaller cubic quantity to truck away. It is denser,
7 heavier, and does not take too many trucks to haul away
8 from your plant. It also saves in boiler size. You can
9 have higher temperatures within the boiler and somewhat
10 greater efficiency, and so on.

11 THE CHAIRMAN: What did you say the fusion
12 point of the Drummond coal was?

13 MR. HARRINGTON: 2800°.

14 THE CHAIRMAN: Supposing you have a temper-
15 ature of over 3000°.

16 MR. HARRINGTON: I say that is the temperature
17 within the furnace itself, but some of that temperature
18 if it is travelling through the ash to get at the bottom,
19 it won't be even through the furnace, if you understand.

20 THE CHAIRMAN: Is there any particular charact-
21 eristic of the fire to which the word "cyclone" is
22 applicable?

23 MR. HARRINGTON: Yes.

24 THE CHAIRMAN: What is it?

25 MR. HARRINGTON: The way it operates. The
26 coal comes in and is picked up by a very big, high
27 velocity stream of air, something like 200 miles per
28 hour which goes into the furnace and in a cyclonic motion,
29 takes the coal and throws it against this molten slag
30



1 where it sticks and burns in that position.

2 THE CHAIRMAN: All of this coal is powdered?

3 MR. HARRINGTON: It is not powdered, it is
4 crushed.

5 THE CHAIRMAN: It is crushed?

6 MR. HARRINGTON: It is pressed, it is not
7 pulverized.

8 THE CHAIRMAN: And it is kept in motion by
9 the pressure?

10 MR. HARRINGTON: That is right.

11 THE CHAIRMAN: And it is sustained by air
12 pressure?

13 MR. HARRINGTON: Right, and also because of
14 the high velocity, there is also a great quantity of
15 air going in which allows complete combustion.

16 THE CHAIRMAN: Is that air heated?

17 MR. HARRINGTON: Yes sir.

18 THE CHAIRMAN: But I suppose, not up to 3000°?

19 MR. HARRINGTON: No sir, it is heated. What
20 we do, in order to heat the air, we use waste heat at
21 one end of the boiler, and the amount of heat in the air
22 depends upon the amount of waste heat available.

23 THE CHAIRMAN: Besides those two types of
24 coal, the Acadia, and the Drummond, you have no difficulty
25 with the Dominion coal supply?

26 MR. HARRINGTON: Not if we get consistent
27 quality.

28 THE CHAIRMAN: No matter what the particular
29 grade may be?

30 MR. HARRINGTON: That is right.



1 THE CHAIRMAN: Consistency is a Jewel.

2 MR. HARRINGTON: The reason for the consistency
3 is very simple to understand. In the boilers there are
4 two boilers or two furnaces and in our automatic equipment
5 which regulates the amount of air and fuel, in this
6 case it must be kept in balance. The control for that
7 is back in one central place, and because of the heat
8 in that furnace, you have to keep it back out of the main
9 stream, it looks at the two furnaces as if they were one
10 furnace. If you have good coal in one furnace and bad
11 coal in another, you have indigestion. If you have the
12 same kind of coal in both of them, you probably digest
13 them.

14 THE CHAIRMAN: You have two furnaces that
15 more or less co-operate.

16 MR. HARRINGTON: That is right, so that if
17 the control calls for more air, it will put more air in
18 both furnaces at the same time. If it calls for more
19 coal, it puts more coal into both furnaces at the same
20 time, and yet the furnaces are fed from two hoppers.

21 As you load coal at different plants and put
22 it in the main hoppers, if you have good coal and bad
23 coal together, it sandwiches and you will have layers
24 coming out of the hopper. If you have different consist-
25 encies of coal, you will get spots where you have good
26 coal in one hopper and bad in another, and it will vary.

27 THE CHAIRMAN: What is good and bad?

28 MR. HARRINGTON: It is different in calorific
29 value, that is the coal heat unit.

30 THE CHAIRMAN: It will make a difference in



1 the heat that is communicated to the water?

2 MR. HARRINGTON: That is right and a difference
3 in the ash quantity.

4 THE CHAIRMAN: Would these temperatures be over
5 1900°?

6 MR. HARRINGTON: The greatest problem we get
7 in ash is as we change load, sir---

8 THE CHAIRMAN: As we do what?

9 MR. HARRINGTON: Change load. For instance,
10 at this time of day, from now through until eleven o'clock
11 tonight, we will be running at quite a high output of
12 load, but at eleven o'clock tonight, our load will drop
13 to about 30% of our supertime load. That means we
14 must drop on the amount of coal going into the furnace.
15 They may operate in the furnace at 3000°, that drops
16 down, and as you get down close to the point you wish,
17 if you have too high an ash fusion temperature, the
18 ash disposal area starts to clog.

19 THE CHAIRMAN: Are you speaking of the cyclone
20 now?

21 MR. HARRINGTON: Yes, the cyclone boiler.

22 THE CHAIRMAN: It is two fired boxes in
23 tandem in the cyclone.

24 MR. HARRINGTON: That is right. In the
25 larger areas they even might have two furnaces in a
26 tandum.

27 THE CHAIRMAN: What about your other furnaces.

28 MR. HARRINGTON: As far as the other furnaces
29 are concerned, we can burn the Pictou coals, and burn
30 them successfully. Then it is just a matter of consistency,



1 and our big problem with the Pictou coal is to be able
2 to get quantity for a consistent run, because once again
3 in the pulverized fuel furnace, we can burn it with no
4 problem. Anyway, high ash fusion is an advantage. Our
5 problem is we cannot get quantity for a consistent run.
6 Then, of course, the other disadvantage is that they are
7 very high in percentage ash, for instance, you will
8 remember that was mentioned in the brief.

9 THE CHAIRMAN: I remember that.

10 MR. HARRINGTON: You will note it is from
11 5% for Dosco in this area, to something in the order of
12 20% and higher for the Pictou coals. Therefore, they
13 are a disadvantage to you, in that you have that much
14 more ash to dispose of, and that much more ash to drop
15 in your mechanical dust collectors in the furnace, in
16 order that you do not have too great stack emission. We
17 have a certain plant at Halifax in the centre of the
18 city, right alongside a hotel, and stack emission is
19 a very important matter to us and one that we have been
20 criticized for.

21 THE CHAIRMAN: When you do use powdered coal,
22 is the ash the element that may cause the mischief.

23 MR. HARRINGTON: Yes, it is the biggest element
24 to cause mischief, except when we find that inconsistency
25 and we get carry-over of ash, and we also get carry-over
26 of carbon, in other words black smoke or soot.

27 THE CHAIRMAN: Even with the powdered coal,
28 you have a difference in its effectiveness in the other
29 boiler, I mean the cyclone.

30 MR. HARRINGTON: That is right, sir, but



1 consistency is the big problem in the pulverized fuel
2 boiler.

3 THE CHAIRMAN: Consistency is the main thing.

4 MR. HARRINGTON: Yes, consistency is the main
5 thing. Again it is the big problem, and that is why our
6 boiler does not burn Sydney type coal in our pulverized
7 coal boilers, because it is designed for proper balance
8 of heat temperature inside the boiler, so that we do
9 not get slagging.

10 THE CHAIRMAN: Yes, you do not go above the
11 fusion point.

12 MR. HARRINGTON: We do not get slagging
13 generally in the steam boiler burning Cape Breton coal
14 because we have less ash.

15 THE CHAIRMAN: Well that is a very enlighten
16 ing statement regarding it. Otherwise, you think the
17 Cape Breton coal is quite satisfactory?

18 MR. HARRINGTON: Very, and one of our troubles
19 is lately we have had a lot of trouble with the coal,
20 which we say is a marketing problem. It isn't that
21 the basic coal from certain pits is bad, but from the
22 best of our knowledge, the mechanical miner - I am not
23 too well qualified on this, sir, but the story that we
24 have is that they have been trying to get more domestic
25 type coal on the mechanical miner - have to put in
26 wedges and keep the miner down.

27 THE CHAIRMAN: Doesn't that result in higher
28 sizes?

29 MR. HARRINGTON: That is right sir. Now the
30 result of that is that this miner on many occasions was



1 able to get down into the pavement of the mine so that
2 the slack which comes off the bottom part of the miner
3 gets more rock in it.

4 THE CHAIRMAN: You think there is foreign
5 matter?

6 MR. HARRINGTON: And this foreign matter
7 in this has been worse than the inherent matter in the
8 coal because of its geological formation and inclusion
9 in the coal.

10 THE CHAIRMAN: How are you on punctuality of
11 deliveries?

12 MR. HARRINGTON: Punctuality of deliveries sir
13 perhaps I should mention something that might be of
14 interest to you on delivery. I mentioned here this
15 morning when coal varied in price from I think it was
16 \$4.85 to \$11.61, at the present time. Coal during that
17 period reached a peak of some \$12.00. I haven't got the
18 exact figure in my mind at the moment, but let us say it
19 hit a peak of something a little above \$12.00.

20 THE CHAIRMAN: That is the price you paid on
21 the dollar?

22 MR. HARRINGTON: F.O.B. Halifax.

23 THE CHAIRMAN: You say it ranged from four
24 something?

25 MR. HARRINGTON: \$4.85.

26 THE CHAIRMAN: What did you pay \$4.85 for?

27 MR. HARRINGTON: The same coal that we are
28 getting today sir for \$11.61.

29 THE CHAIRMAN: You went back to 1938?

30 MR. HARRINGTON: That is right. No no,



1 between 1938 and 1940 we were paying \$4.85 a ton. That
2 gradually increased until March 1st 1952, between March
3 1st 1952 and December 31st of 1956 we were paying \$12.05
4 a ton.

5 At that time we were receiving our coal, it
6 was coming from Sydney by ship to pier 9 in Halifax,
7 unloaded at the unloading tower there and they maintained
8 a stockpile of coal of approximately ten to fifteen
9 thousand tons, and they then took it in barge from pier
10 9, moved it down the harbour and unloaded it at our
11 wharf.

12 We noticed that the cost was increasing, and
13 we contacted Dosco to see if we could do anything our-
14 selves to help cut down the cost, and by examining
15 freight rates and making recommendations to the Canadian
16 National Railways, etc, we found that by putting in a
17 railway siding on our pier and taking coal delivery by
18 rail that we could reduce the cost so that the following
19 year, January 1st 1957 to May 13th 1957 the price
20 dropped down to \$1.19 a ton as a result of our company
21 spending some \$350,000.00 on rail siding and rail delivery
22 facilities.

23 THE CHAIRMAN: \$350,000.00?

24 MR. HARRINGTON: That is right, sir.

25 THE CHAIRMAN: To get a siding?

26 MR. HARRINGTON: That is right sir. That is
27 the siding and the equipment too, and the railway car,
28 and that type of car.

29 THE CHAIRMAN: Unloading equipment?

30 MR. HARRINGTON: Yes. But that was a very



1 worthwhile thing as can be seen. It was \$1.00 a ton
2 saving, and burning perhaps 90,000 tons of coal a year
3 at that period, we returned \$90,000 in the first year.
4 Now when we looked at our Tufts Cove plant across the
5 harbour here at the future time we will be in a position
6 there that we can take say 10,000 ton ship load and
7 unload direct and there might be a further saving at that
8 time.

9 THE CHAIRMAN: Every handling is bound to
10 add substantially.

11 MR. HARRINGTON: That is right. It is one
12 of the things that happened to us. In our analysis of
13 the situation, most coal in the Province is loaded on
14 to a railway car at the mine so it either goes by railway
15 to the pier to go into the ship or with the shortness of
16 haul between Sydney say and Halifax, keep it in that
17 railway car and pay the freight rate. The handling
18 became mechanical, certainly, over the past years.

19 THE CHAIRMAN: What is the rate from Sydney
20 to Halifax?

21 MR. HARRINGTON: In this brief, I think I
22 quoted it at \$2.35. Something of that order.

23 THE CHAIRMAN: All right, as long as it is
24 in the brief. I do not recall.

25 MR. JOHN ROACH: He said Pictou coal, in the
26 brief the Pictou Coal was not of use to you. This is
27 for the press' sake and for the Chairman's sake. We
28 have eighteen seams in Pictou. Now you might have the
29 same linear run going to your plant. I want this
30



1 correction for the press' sake when you say all Pictou
2 coal is not of use that is an incorrect statement.

3 MR. HARRINGTON: I would be very glad to say
4 all Pictou coal that had been offered to us. Now I
5 will name those particular Pictou coals offered: Acadia,
6 Drummond, and Greenwood. Those are the only Pictou
7 coals that have been offered to us.

8 MR. ROACH: In your brief you include all
9 Pictou Coals.

10 MR. HARRINGTON: That is right. I should
11 have said Pictou coals that have been offered to us.

12 MR. ROACH: It is a wrong statement.

13 THE CHAIRMAN: I did not hear the question.

14 MR. HARRINGTON: The question was where I say
15 Pictou coals are not satisfactory to us, he suggests
16 that there are seams in the Pictou coal available that
17 we have not analysed, and that might be very satisfactory.
18 That could be so. I have amended my statement to say of
19 the Pictou coals that have been offered to us for use in
20 our plant we have found this difficulty.

21 MR. ROACH: Wouldn't you suggest sir, that
22 you are just getting what is left over? I am suggesting
23 you are just getting what is left over. I mean to a
24 point the Drummond has to work; they probably have 90
25 men. Greenwood has to work; Acadia has to work and you
26 don't get the best. Acadia sells domestic, so you are
27 condemning all our coals.

28 MR. HARRINGTON: Of course, what we are
29 getting is industrial coal, and again if you wish I
30



1 will limit my statement to industrial coal. That is the
2 whole point of our brief is with respect to industrial
3 coal.

4 THE CHAIRMAN: Well Mr. Harrington I want
5 to thank you for a very full statement.



1
2 THE SECRETARY: I would like to introduce Mr.
3 J.M. Cameron who will present a brief on behalf of the
4 Chamber of Commerce of the City of New Glasgow. This
5 brief will be entered in our records as Exhibit Number
6 23.

7 -- EXHIBIT NO. 23: brief submitted on behalf of the
8 New Glasgow Chamber of Commerce.

9 SUBMISSION ON BEHALF OF THE
10 NEW GLASGOW CHAMBER OF COMMERCE.

11 APPEARANCES:

12 MR. J.M. CAMERON,

13 DR. GOODMAN:

14 MR. CAMERON: Mr. Commissioner, I am here
15 today, as your counsel has said, to represent The
16 New Glasgow Chamber of Commerce. I am not a practical
17 coal miner. I have no direct association as such with
18 the industry other than that I live in New Glasgow and
19 New Glasgow's position with regard to the coal was very
20 clearly portrayed to you this morning in the brief
21 submitted to you by the Honourable Premier so you will
22 understand our position here.

23 I have with me a geologist who lives in New
24 Glasgow, Dr. Goodman. Your colleague, Dr. Cameron, can
25 acquaint you with his qualifications. I have nothing
26 to offer to you with respect to coal in the technical
27 sense and should there be anything respecting coal as a
28 fuel, and so on, in the County of Pictou, then Dr.
29 Goodman will be glad to carry that part of it.
30



1 The New Glasgow Chamber of Commerce submits
2 this brief in the belief that it is in the interests
3 both of the communities which depend on the coal industry
4 for support and the coal industry directly. The Chamber
5 would record its appreciation of the Government's
6 interest in the coal industry, as witnessed by the
7 appointment of this Commission of Inquiry, and the oppor-
8 tunity to make the Chamber's view known.

9 The Chamber would record its appreciation of
10 the contribution the persons associated with the industry
11 have made to the welfare of Pictou County, and its
12 appreciation of the governmental assistance in various
13 forms given the industry, without which the industry
14 would not have survived up to this point.

15 Respecting the obligation the New Glasgow
16 Chamber of Commerce is under to the miners of Westville,
17 Stellarton, Greenwood, and Thorburn, we would here put
18 on record, with the Commission's permission, our belief
19 that there never has been national awareness of the
20 contribution to Canada's well being that has been made
21 by the men directly engaged in the coal industry. Were
22 the sole contribution of the coal miners to national
23 well being limited to their efforts in the first and
24 second world wars, that contribution alone would be of
25 itself sufficient in scale to merit national recog-
26 nition as an indispensable contribution to the success-
27 ful prosecutions of two world wars; when one adds to
28 the wartime coal production statistics the sum total
29 of the peace time effort, and when added to that total the
30



1 facts of life in coal mining as we who live with the
2 coal miners know them, the overall total is a debt that
3 all Canadians are owing. If the commission will permit
4 the observation, we would record, over and above the
5 obligation we as a Chamber of Commerce owe the coal
6 industry, our pride in the accomplishments of the
7 draegermen of Pictou County who, at Moose River in 1936,
8 at Springhill in 1956 and 1958, by their heroism
9 challenged the admiration of the world. These mining
10 disasters and the resulting deeds of the draegermen
11 were widely publicized: before and after these incidents
12 in Nova Scotia mines. The draegermen in Pictou County
13 had their courage and skill tested by explosion and fire
14 in our Pictou County pits - 1913, 1914, 1918, 1924, 1929,
15 1935, and 1952. They were not found wanting. The price
16 that has been paid for coal in the County of Pictou is
17 not reckoned entirely in dollars and cents. It is cal-
18 culated too, by those who live in Pictou County, with the
19 dreadful toll in human lives taken in fires, explosions,
20 falls of coal and stone, suffocating gas, and the other
21 perils which every miner faces underground every day.
22 It is with humility and with pride, as well as with
23 gratitude, that the New Glasgow Chamber of Commerce
24 records its appreciation of the elementary economic fact
25 that without the coal miners in Pictou County, the Town
26 of New Glasgow would be but a small fraction of the size
27 it is today.

28 We have no submission to make with respect to
29 the practical operation of the collieries in Pictou
30



1 County, nor any submission with respect to freight rates,
2 tariffs, subventions, nor subsidies from any source in
3 any form, other than as hereafter noted, nor any sub-
4 mission respecting fuels competitive to coal. We
5 assume these matters, which are constantly under review
6 by the persons directly concerned, will be brought to
7 the Commission's attention by others.

8 The primary submission that we would make
9 is based upon the premise that the coal industry by
10 itself cannot be divorced from the economy of Nova
11 Scotia and the other Maritime provinces, in that the
12 plight of the coal industry is the epitome in example of
13 comparison between Maritime provinces economic development
14 and economic development in the central provinces of
15 Canada.

16 We as a Chamber of Commerce have limited fin-
17 ancial resources at our disposal, and we look to the Royal
18 Commission on coal with its access to expert opinion,
19 its access to statistical and other records, and its
20 presumed resources which would permit extensive research,
21 as a means of ascertaining the numerous factors which
22 affect the industry adversely, and of recommending to
23 the federal government ways and means of effecting
24 improvements intended to be of benefit to the industry.
25 Should the scope of this inquiry be limited strictly to
26 the immediate affairs of the coal industry, we submit
27 that the value of the inquiry will be comparable with the
28 value of previous coal commissions of inquiry, and, while
29 we do not suggest that previous commissions were without
30 value, the simple fact that it is generally agreed



1 today that coal in Nova Scotia is in a perilous state
2 is somewhat indicative of the value of previous commiss-
3 ions, or, more properly expressed, the fact that success-
4 ive governments in Canada and to a lesser degree in
5 Nova Scotia never had the will to adopt in full what
6 previous commissions recommended, is indicative of the
7 value successive governments placed upon previous comm-
8 issions.

9 The coal industry, as with all industry in
10 Nova Scotia, is within the control of the political and
11 economic policies of the government in Ottawa. The
12 policies of the central government since 1867 have
13 resulted in a concentration of population and wealth in
14 the central provinces arising from industrial develop-
15 ment; the same policies are as applicable to Nova Scotia
16 as they are to Ontario and Quebec, with directly opposite
17 results in industrial development, always assuming,
18 and this is not intended to be a facetious remark, that
19 industry has developed in central Canada largely as a
20 result of Ottawa policies, and not in spite of them.
21 Perhaps the best unit of measurement to apply in assessing
22 the success or failure of a program of economic develop-
23 ment is per capita income. A comparison of per capita
24 income in Nova Scotia and Central Canada indicates that
25 the national economic policies of Canada have, insofar
26 as Nova Scotia is concerned, failed in their purpose
27 of providing equal opportunity and an equitable standard
28 of living for all as a primary objective of our national
29 life.
30



1 How then, have these national policies -- the
2 tariffs, the trade regulations, the fiscal regulations,
3 the direct and indirect tax collection policies, the
4 restrictions and the encouragements and so on, of the
5 central government at Ottawa affected the industrial
6 development of Nova Scotia? The answer to that question
7 lies in the pitifully few industries we have in this
8 province.

9 While we are appreciateive of the work of
10 APEC and sundry departments of both Governments, we do
11 not foresee additional consumption of electric power to
12 the extent that the coal industry will reflect improvement
13 from its present condition. We foresee neither outside
14 industries coming to the province at an accelerated rate,
15 nor local enterprise embarking on industrial endeavour.
16 At the moment, there is evidence giving cause for worry
17 that some of the industries we have may not continue in
18 operation.

19 At this late date it is obvious that the coal
20 industry of itself cannot progress to the point that its
21 employees would be sufficient in number to create a
22 large enough demand for consumer goods to attract second-
23 ary industry to the province to supply the domestic
24 demand, thereby creating a chain-reaction of more indust-
25 ries, more coal, then more miners, then more secondary
26 industries to supply the miners' needs.

27 Inasmuch as industrial development requires
28 resources -- management, labor, capital, material, and
29 finally markets, -- all of which the coal industry has
30 or can get, less markets -- it is not difficult to see



1 the major need - markets.

2 We submit to the Commission that the whole
3 concept of Maritime provinces development should be
4 examined by the Commission. If the federal statutes
5 which enact the policies of the Government at Ottawa
6 would appear to be the cause of the Maritimes lagging
7 industrially, then these are the statutes which need
8 revision to aid the coal industry. To put no fine point
9 on the matter, the New Glasgow Chamber of Commerce
10 submits that the coal industry, as with all Maritime
11 industrial enterprise, is held in economic thralldom
12 to central Canada, and the political bonds of the Mari-
13 times to Central Canada, whatever the original intent
14 in 1867, have since become economic shackles which have
15 held our industrial pace to a walk while the central
16 Provinces gallop. We hope that the Commission will
17 accede to our request for research into this phase of
18 the conditions that handicap the coal industry.

19 The Chamber of Commerce is cognizant of some
20 opinions expressed by the Dominion Fuel Board and others
21 that within so and so years the hydro power resources
22 potential of Ontario and Quebec will be exhausted, and
23 from that still unknown date, coal will once again be
24 the principal means of generating electricity. It would
25 be speculative to suggest to the Commission that within
26 so and so years oil, gas, atomic, or solar heat will be
27 the principal source of electric power. There is no
28 speculation in our observation however, that should coal
29 be restored to its once pre-eminent position in Central
30



1 Canada, it will be American coal as it always has been,
2 and not Nova Scotia coal, unless of course there is a new
3 concept of the Maritime Provinces place in the sun by
4 the Federal authority in Ottawa.

5 There is another aspect of the coal industry
6 in Nova Scotia which the Chamber of Commerce submits is
7 contrary to the best interests of the industry and
8 the public. That aspect is monopoly control of the
9 greater part of the industry and the associated concerns
10 which are large consumers of coal. This part of our
11 submission is intended to request the Commission to give
12 scrutiny to the corporation statutes of the Provincial
13 and National Governments which have jurisdiction in
14 the forming of companies, the powers of holding companies,
15 the issue of stock shares as payment to directors and
16 promoters, and statutes which permit the piling of
17 merger upon merger and absentee ownership and absentee
18 control of mineral deposits and industrial plants. Is
19 it the understanding of the Governments in Ottawa and
20 Halifax that the corporation statutes are intended
21 to be a practical means of developing and controlling
22 the nation's resources? If that is the intention, how
23 in their practical application to the coal industry do
24 these statutes function, and what is the result to the
25 coal industry? We are hopeful it is within the scope
26 of this inquiry to procure an answer to this question.

27 We are concerned with the corporate structure
28 pertaining to ownership of the leases and principal
29 coal operations in the County of Pictou and the Province
30



1 of Nova Scotia. The corporate structure is of such
2 magnitude and complexity that the Commission in dis-
3 charging its responsibilities should, it is submitted
4 with deference, examine it very closely to determine
5 whether or not the chain of control is a benefit or a
6 hindrance to the industry.

7 Until 1957 the chain began in Montreal, in
8 the head office of Dosco. Subsequent to 1957 the chain
9 began and still begins in London. It goes through a
10 corporate body in Toronto, another corporate body
11 with sales and administrative office in Montreal, then
12 another administrative body in Sydney, and finally through
13 Stellarton reaches to the Acadia Coal Company Limited
14 mine in Thorburn.

15 To the Chamber of Commerce it appears question-
16 able that a mineral asset in Pictou County should be
17 vested in financial interests in London. It is to be
18 noted that nearly all the coal leases of the Province
19 are now back, in the ownership sense, in Great Britain,
20 which is exactly where they were in the beginning by
21 Royal Warrant of monopoly to the General Mining Assoc-
22 iation more than 100 years ago.

23 The Commission, it is suggested, will have
24 no difficulty in procuring information on the General
25 Mining Association policies and affairs in Nova Scotia,
26 providing such information would be considered germane
27 to the problems of the coal industry as they appear to
28 be in 1960.

29 The Chamber is aware of the saving in adminis-
30 tration, sales and technical services costs ensuing from



1 the Acadia Coal Company's association with the Dominion
2 Steel and Coal Corporation. The Chamber would note,
3 however, that the Acadia Coal Company Limited is a sub-
4 sidiary of the Nova Scotia Steel and Coal Company Ltd.,
5 which latter is a subsidiary of the Dominion Steel and
6 Coal Corporation Ltd., which latter is a subsidiary of
7 A.V. Roe (Canada) Ltd., which latter is a subsidiary of
8 Racair Ltd., in England, which latter is a subsidiary
9 of the Hawker-Siddley Group. The latter corporation
10 is also the parent concern of the Brush Group, which
11 has a long list of British companies under its control.
12 In the late months of 1959 the Hawker Siddley Group mer-
13 ged with the Dehaviland interests in Great Britain.

14 While the Chamber certainly has no evidence
15 to suggest that the Acadia Coal Company's association
16 with the Hawker-Siddley Group is harmful to the Acadia
17 Coal Company, it is submitted that in the fitness of
18 things any value to the Acadia Coal Company ceases with
19 the Dosco head office in Montreal. In the event of any
20 corporation charges being assessed against the Acadia
21 Coal Company, over and above Dosco charges, or if Dosco
22 charges upon Acadia include a sum necessary to meet a
23 Roe and/or Hawker-Siddley assessment, such charges
24 represent a plus factor to the costs problem of the
25 industry, consequent increase in the price of coal to
26 the consumer, and aggravation of the sales problem
27 arising from the competition of other fuels.

28 The Chamber submits to the Commission that
29 owners of the steel and coal industry of the Province
30



1 would be more likely to operate the two in the best
2 interests of the people of the Province if the owners'
3 interests were primarily concerned with the steel and
4 coal industry of Nova Scotia. The Chamber submits that
5 the complex corporation structure in which the major
6 part of the Nova Scotia coal industry - and its steel
7 and manufacturing associates in Nova Scotia - finds
8 itself by a process of mergers, is unlikely to be of
9 beneficial effect to the coal industry. It is to be
10 noted that the Corporation statutes of the country permit
11 mergers of the type which occurred in 1957, whereby
12 A.V. Roe (Canada) Limited acquired control of Dosco. It
13 is also to be noted that it is questionable, to say the
14 least, that such a merger could have happened within the
15 United States, in that the Anti-trust laws of the
16 United States would probably prevent mergers of the type
17 which have ensnared the coal and steel industry of the
18 Province. The effect of this latest and previous mergers
19 and the Corporation statutes which permitted the mergers,
20 it is submitted, are within the scope of the Commission to
21 investigate. We would stress that the coal leases and
22 the industry are now owned and controlled in another
23 continent by absentee directors of varied interests.
24 The Commission, with its resources of research, may or
25 may not find that the association of financial interests
26 in which the coal industry finds itself a partner is
27 beneficial to the industry and the public.

28 The Chamber of Commerce would not like to be
29 misunderstood. The Chamber believes in private enter-
30



1 prise, in the profit motive, and in the capitalistic
2 system.

3 We do not however, subscribe to the belief
4 that private enterprise should give licence to anyone
5 to exploit the natural resources of Nova Scotia as but
6 another small unit in a vast complex of global dimen-
7 sions.

8 We do not believe that free enterprise should
9 give license to anyone to have the power of economic life
10 or death over whole communities, by having the authority
11 to abandon industries competitive to similar industries
12 within the same corporate structure, or transfer indus-
13 tries from one locality to another within the same corporate
14 structure, or transfer industries from one locality to
15 another to take advantage of lower costs. We do not
16 believe that private enterprise should give license to
17 anyone, to reduce human beings, such as coal miners, to a
18 plus or minus factor on balance sheets and statistical
19 tables.

20 We assume that evidence will be placed before
21 the Commission respecting the monies paid or rebated or
22 forgiven, in one form or another, to the coal industry by
23 municipalities, provinces, and the Federal treasury.
24 It is submitted that these amounts of money were received
25 by the industry from the various donors whose intent
26 was to assist the employees and the coal mining communities.
27 It is submitted that the contribution so made represents
28 an investment by the public in the coal industry, and
29 accordingly the public should have a greater measure of
30



1 control as to how subsidies are applied than has been
2 the case in the past. The Chamber submits that inasmuch
3 as the Governments in the past have financed the coal
4 industry, decisions which affect employment should not
5 be vested entirely with the colliery owners. It is
6 to be noted that when money is needed by the industry,
7 it is frequently sought from the Governments. When,
8 however, owners close collieries, closures sometimes in
9 the owners' view come within the accepted rights of priv-
10 ate enterprise, and Government action is described as
11 interference with private persons who are managing
12 private property.

13 The Chamber assumes that the Commission will
14 have access to the records and findings of previous
15 royal commissions into the coal industry, including those
16 specifically concerned with the Acadia Coal Company, Ltd.

17 The reports to which we would refer the
18 Commission as having direct relationship to the industry
19 in Pictou County, are the "Report of the Royal Commiss-
20 ion respecting the coal mines of the Province of Nova
21 Scotia, 1925", and another of the same name in 1932:
22 "The Report of the Royal Commission on the Acadia Coal
23 Company 1937-1938:" and the "Report of the Commission
24 on Trenton Steel Works 1944."

25 All of these Commissions were appointed by
26 the Government of the Province of Nova Scotia. Another
27 document the Commission may find of interest is the
28 record of a Court action, the Supreme Court of Nova
29 Scotia, July 15, 1938, the Eastern Trust Company,
30



1 plaintiff, the Nova Scotia Steel and Coal Company
2 Limited, defendant.

3 The latter record which is concerned with
4 the discharge of the Nova Scotia Steel and Coal Company
5 Limited from receivership, and the report of the
6 Commission on Trenton Steel Works Limited, provide an
7 insight into the policies and actions of the Corpor-
8 ations and some of the persons directly concerned with
9 leadership of the Corporations, which own the greater
10 part of the coal areas in Nova Scotia.

11 With respect to future markets for Nova
12 Scotia coal, there is brought to the attention of the
13 Commission the intention of the Dominion Steel and Coal
14 Corporation to establish a steel processing plant and
15 subsequently a steel making plant in the Montreal area.
16 It is submitted that notwithstanding public statements
17 to the effect that the proposed steel plant will be of
18 benefit to the steel industry in Sydney, (which latter
19 consumes coal in large quantities) this proposal should
20 be examined carefully from the viewpoint of what effect
21 it will have on the coal industry of the Province.
22 It is submitted that the Commission will find abundant
23 evidence that where corporations in Central Canada control
24 and manage industries in the Maritimes and similar ind-
25 ustries in Central Canada, the Maritime branch of the
26 Corporation is abandoned. This has happened with some
27 Dosco subsidiaries in Pictou County, with adverse effect
28 on the coal industry.
29

30 All of which is respectfully submitted by the



1 New Glasgow Chamber of Commerce.

2
3
4 New Glasgow, N.S.

5 March 1, 1960.

6 THE CHAIRMAN: Well, of course, Mr. Cameron,
7 we cannot enter into the question of ownership of these
8 mines, but what has the corporate ownership to do with
9 the fact that in some cases you are almost four miles
10 under the Atlantic ocean.

11 MR. CAMERON: We are not in Pictou County.

12 THE CHAIRMAN: I am dealing with the coal in
13 relation to the company that owned the great bulk of it,
14 that has not anything to do with corporate enterprise,
15 and that is one very terrifying thought. There was no
16 trouble about the coal and its shipment and market when
17 they were producing eight million tons. That was the
18 production that was demanded by the purchasing market.
19 What would you think of the case in Belgium where 25,000
20 miners are being thrown out of work?

21 I can understand, in looking around, that there
22 is some dissatisfaction, but when you speak of private
23 enterprise in one breath, in the next breath you should
24 not take private enterprise from its liberty of action.
25 Are you familiar with what has happened in the American
26 coal fields?

27 MR. CAMERON: Yes sir.

28 THE CHAIRMAN: Do you know that the working
29 force has been reduced from over 600,000 to less than
30 200,000 by mechanization?



1 MR. CAMERON: Yes sir.

2 THE CHAIRMAN: And when a mine in West
3 Virginia is not paying its way, what do they do with it?
4 They close it.

5 MR. CAMERON: They close it.

6 THE CHAIRMAN: That is private enterprise.

7 MR. CAMERON: That is private enterprise.

8 THE CHAIRMAN: Private enterprise consistent
9 in its theory.

10 MR. CAMERON: But we have tried to suggest---

11 THE CHAIRMAN: Don't you think if coal here
12 that costs \$10.66 to mine and bring to the pithead were
13 capable of entering a wider and cheaper market, it would
14 do so? I listened to a shareholder who bought some
15 preferred shared shares five or six years ago, and he
16 was complaining he had received nothing in the way of
17 dividends. Don't you think the company would make prof-
18 its if it could? I know that the situation is hard, but
19 what I am suggesting is that we must look at the facts.

20 MR. CAMERON: Yes, we must all look at the
21 facts, and we look at them in New Glasgow.

22 THE CHAIRMAN: What relation has the Corporate
23 structure here to do with the difficulties of mining in
24 Nova Scotia?

25 MR. CAMERON: You can find evidence to
26 answer your question in some of the work of previous
27 Royal Commissions which I have just here referred to
28 you. You can find where millions of dollars disappeared
29 one day in the Acadian Coal Company.
30



1 THE CHAIRMAN: All I can say is, I don't
2 think the corporate structure has the slightest thing
3 to do with the cost of mining coal in this province.

4 MR. CAMERON: I am not too sure about that.

5 THE CHAIRMAN: Can you suggest anything
6 concrete?

7 MR. CAMERON: We did suggest to you that you,
8 with your resources of research, which we have not got,
9 look into the corporate structure of the coal mines.

10 THE CHAIRMAN: How can that affect the cost
11 of taking coal out?

12 MR. CAMERON: How much money is being levied
13 against the Acadia Coal Company by the head office in
14 Dosco, Montreal? I don't know. I think there is some.

15 THE CHAIRMAN: I might tell you that all of
16 those charges are investigated by the Canadian Fuel
17 Board, the Canadian Coal Board. Every charge is checked.
18 There is nothing concealed from that Board, and if your
19 suggestions were sound, it would be exposed to the
20 auditors of the Coal Board.

21 MR. CAMERON: Furthermore, I think we said
22 a moment ago that over and above Dosco charges, if there
23 were further charges up on the higher level, we question
24 that they would be of any value to the practical oper-
25 ations of the Acadia Coal Company.

26 I mean there is a great saving in administrat-
27 ion and technical costs of Acadia Coal Company.

28 THE CHAIRMAN: So you have some company which
29 is associated in Dosco but above Dosco level. That is
30



1 pretty nebulous. It may be we will investigate that.

2 MR. CAMERON: And then we are very worried,
3 as you know, about what is to happen to our steel indust-
4 ry, you see, with consequent affect upon the coal indust-
5 ry.

6 THE CHAIRMAN: It is the privilege of private
7 industry to seek the market that is most profitable.

8 MR. CAMERON: Absolutely sir. Of course it
9 is, but I mean when you have a vast corporate complex,
10 Mr. Commissioner, I am just asking - I am certainly not
11 here to argue with you sir - when you have a vast corpor-
12 ate complex, you see all right, here am I, John Doe,
13 Chairman of the Board of a terrific affair which has
14 a company here and a company there, and so on, and this
15 one is not doing well but this one is doing pretty well.

16 I knock this one off because this fellow here
17 can do as well. Do you follow me? When I knock this
18 fellow off down here he is in Nova Scotia. That is more
19 trouble for the coal industry because that industry was
20 using Nova Scotia coal, the one I knocked off in my
21 capacity as Chairman of the Board of some hypothetical
22 corporation.

23 Can we point out just one instance? In the
24 railway car business which we depended upon in New
25 Glasgow, we have in Trenton the Eastern Car Company.
26 They have in Montreal in competition with Eastern Car
27 Company, Canada Car and Foundry. Those companies
28 competed one with another for years, but now - since
29 1957 - they are both owned by the same Corporation.
30



1 Anyone in the world can build two of anything
2 under one roof cheaper than one and one, and again I am
3 the Chairman of the Board of a hypothetical Corporation.
4 I am interested in my balance sheet. I say why operate
5 that down in Nova Scotia when we can make more money by
6 concentrating our Corporation in the one plant?

7 THE CHAIRMAN: Do you deny that to private
8 enterprise?

9 MR. CAMERON: As a Nova Scotian, and a person
10 living in New Glasgow, I certainly do. It all depends
11 on whose ox is being gored. That is the whole point.

12 THE CHAIRMAN: Mr. Goodman?

13 MR. GOODMAN: Sir?

14 THE CHAIRMAN: Have you made any enquiries
15 into the reserves of coal in Pictou County?

16 MR. GOODMAN: Sir that is a point on which I
17 am extremely sensitive, and would be pleased to give my
18 views. They are purely my views and not those of the
19 Chamber of Commerce, and if I may report on what has happ-
20 ened in the past few months - perhaps you have been so
21 informed, but if not this may be of interest.

22 A group was formed to study the large reserves
23 which the Premier mentioned this morning known as the
24 Westville main seam.

25 I would like to point out the Westville main
26 seam is a very deep line pit of coal. By "deep line"
27 I am talking of over 2000 feet at best, and this pit of
28 coal has only been touched by previous workings in one
29 drill hole, so actually its value from a point of view
30



1 of quality and quantity is not really known, but it is
2 a very difficult mining operation. However, it was
3 thought that it was a large deposit and I happened to
4 be a member of a group and I must frankly admit I
5 thought our stumbling block to that immediately was
6 whether Dosco through the A.V. Roe Company would be
7 willing to release the leases.

8 They were approached and said they were
9 quite willing to do so on a basis of 10¢ per ton, with
10 an original down payment of \$150,000.00; this to be
11 offset against the first million and a half tons. This,
12 I must admit, I thought, and again I am speaking person-
13 ally, was an extremely reasonable offer because I think
14 the problems expected with the Westville main seam do
15 not hinge on ten cents a ton. I think if they gave it
16 it would be just as big a problem - taking it lock stock
17 and barrel, you would have just as much a headache trying
18 to figure out how to sink a deep shaft and what is the
19 quantity and quality to justify this operation.

20 However, we met with representatives of the
21 Government, and I would like to substantiate the Premier's
22 statement that they would bend over backwards to be help-
23 ful. They did, however, point out that their drilling
24 equipment would not reach the six thousand feet necessary
25 in the Westville main seam and therefore their refusal
26 to do this was based very reasonably on lack of equipment
27 and heavy cost.

28 They did, however, offer to study closer to
29 the surface pits of coal which may not have previously
30



1 been studied. Letters have gone to A.V. Roe asking if
2 they would be willing to release these leases, or at
3 least permit study of these leases, and I would submit
4 that although I do not know the reserve of Pictou County,
5 I think that this would make a wonderful start because
6 I think it fair to the coal industry and to Pictou
7 County to do an assessment of the total, if for no other
8 reason than to prove it isn't there.

9 Have I made my point clear? I am not saying
10 it is or isn't. I don't know. The offer, and the
11 studies of coal close to the surface might make for a
12 small operation. It might be very helpful.

13 THE CHAIRMAN: Thank you.

14 MR. GOODMAN: The answer has not come back
15 from A.V. Roe.

16 THE SECRETARY: I would like to inquire if
17 Mayor L. Matheson of the Town of Westville is here this
18 afternoon.

19 Sir, I would like to present Mayor Matheson.
20 His brief will be recorded as Exhibit No. 24.

21 --EXHIBIT NO. 24: Submission on behalf of the town of
22 Westville.



1 SUBMISSION ON BEHALF OF THE
2 TOWN OF WESTVILLE

3 APPEARANCE:

4 Mayor L. Matheson.

5 MAYOR MATHESON: First of all, I want to
6 thank you and your colleagues for the privilege of
7 being allowed to present this brief on behalf of the
8 Town of Westville. As the Town of Westville I am
9 speaking for one of the towns that has been most hard
10 hit by the reduction of our coal mining industry in the
11 Province of Nova Scotia.

12 We have not got the facilities or the money
13 to do any kind of research work so our brief is simply
14 about those of the men who are closest to the grass roots
15 of this Province - the people. We are just trying to
16 reflect the thinking of the man on the street in the
17 little communities throughout Nova Scotia similar to the
18 town of Westville, and there are many of them.

19 First of all sir I would like to start off by
20 reading what we have on the history of coal in the Town
21 of Westville. Now there is much we may have left out.
22 We did not have too much time to prepare this. This is
23 a rough sketch of the history of coal mining in the
24 Town of Westville.

25 In order to properly understand the problems
26 facing the Town of Westville, which are similar to many
27 other towns in the Maritime Provinces, it is necessary
28 to review briefly the history of coal operations in the
29 said Town. Nearly one hundred years ago the Inter-
30



1 Colonial Coal Company Limited obtained a part of the
2 lease for what was known as the Westville Main Seam.
3 During a period of some 80 years the Inter-colonial Coal
4 Company operated a mine in the Town of Westville, employ-
5 ing seven or eight hundred men, and consistently produc-
6 ing a good grade of coal which they were able to market
7 at a profit. During the said period of eighty years the
8 Intercolonial Coal Company operated at a profit and was
9 the main industry in the Town of Westville. Some seven
10 years ago the Intercolonial Coal Company found that they
11 did not have sufficient coal reserves left in the area
12 covered by their leases to continue operating on a large
13 scale. They applied to the Acadia Coal Company, a
14 subsidiary of Dosco, for an extension of their lease into
15 the remainder of the Westville Main Seam, which was
16 leased to the said Acadia Coal Company. However, al-
17 though the Acadia Coal Company were not operating in the
18 Westville area, and the Intercolonial Coal Company offer-
19 ed them a substantial royalty of from 10¢ to 25¢ per ton
20 for every ton mined, their request was refused. So,
21 although the Intercolonial Coal Company had operated
22 a mine in this main seam for well over 80 years and had
23 a capable staff, as well as miners who knew the seam,
24 and with a plant and equipment geared for the job, it
25 was necessary for them to cease operations and liquidate
26 the company. It is our strong opinion that the Nova
27 Scotia Government should at that time have faced up to
28 its responsibility and arranged that the lease held by
29 the Acadia Coal Company, a Dosco subsidiary be transferred
30



1 to the Intercolonial Coal Company Limited.

2 The result was that the Intercolonial Coal
3 Company Limited went out of business and the remainder
4 of their leases was purchased by the Drummond Coal
5 Company, who have been carrying on a cleaning up oper-
6 ation in the seam for the past seven years, employing at
7 the present time less than 90 men. These men are employ-
8 ed at the most 3 or 4 days a week and in the near future
9 the working force will probably be still further reduced.

10 COST OF PRODUCTION

11 It is our submission that the cost of produc-
12 tion of coal in the County of Pictou is far too high
13 and the main reason for this is the fact that control of
14 all important coal leases in the County is held by
15 Dosco. A few years ago, the method of mining coal in the
16 County of Pictou was what is known as the "Bored and
17 Pillar Method". This was changed to the long wall method
18 by Dosco. However, we submit that the Bored and Pillar
19 method is by far the most economical method of working
20 thick coal seams in the County of Pictou.

21 It is true that the long wall method works
22 well in low seams. However, in the Pictou County seams
23 the result was the loss of $2/3$ of the coal.

24 Another reason for the high cost of production
25 in the coal mines in Pictou County operated by Dosco is
26 that, both underground and overground, there are far
27 too many non-productive officials in ratio to the
28 productive workers. Also, the general efficiency of
29 management in Dosco operations in the said County of
30 Pictou has been very poor, with the resulting high cost



1 per ton of coal to the consumer.

2 Our submission is that the solution to this
3 problem in the County of Pictou is the cancellation of
4 all leases held by Dosco which are not being worked at
5 the present time. It is well known that there are
6 large quantities of good coal in the County of Pictou
7 and we feel that if the leases were open to anyone who
8 wished to take them up, then there would be several
9 small operations started which would be run on a more
10 efficient basis. These small operations would give
11 employment to a great many of the former miners in this
12 area who are now unemployed and unable to find employment
13 due to the fact that they are over 40 or 50 years of age.

14 INDUSTRIAL DEVELOPMENT

15 It is submitted that the only real hope and
16 solution to the problem of coal in the Maritime
17 Provinces is the development of industry in this area which
18 will provide a sufficient market for all coal that could
19 be produced. Coal is linked to the industrial develop-
20 ment of the area and we submit that the problem of coal
21 cannot be considered without also considering what steps
22 must be taken to foster industrial development in the
23 Atlantic Provinces. Let us briefly look at the problem
24 of Industrial Development and our suggested solution.

25 (a) Problem:

26 Due to the Atlantic Provinces' geographic
27 location at the extreme east of the federated provinces
28 that make up the Canadian Nation, some one thousand miles
29 from the main centres of population in Ontario and Quebec,
30



1 it is impossible for most manufacturing industry in the
2 Atlantic region to compete with Central Canadian indust-
3 ry in the production and marketing of goods. The
4 problem is further aggravated by the fact that the nat-
5 ural markets for the Atlantic region to the south on
6 the eastern seaboard of the United States are shut off
7 by protective tariffs, and raw materials that could be
8 imported from that source to assist Atlantic provinces'
9 industry are subject to the same prohibitive tariffs
10 imposed to protect Canadian industry. The population
11 in the Atlantic region is not sufficiently large to
12 absorb the production of industry large enough to be
13 operated economically, yet for the above reasons it is
14 impossible for them to compete in the Central Canadian
15 Market. Another aspect of the problem is the fact that
16 in many cases raw materials used in the manufacturing
17 process in the Atlantic region must be brought in from
18 the central provinces at great cost, thus adding consid-
19 erably to the price of the finished article when manuf-
20 actured. At the present time, about the only industries
21 operating successfully in the Atlantic region are those
22 engaged in the extraction and marketing of the natural
23 resources of the region. However, this is continually
24 declining and will reach a point of no return as the
25 natural resources are depleted. Despite this geographic
26 handicap which makes the growth of industry virtually
27 impossible in this particular region of Canada, the
28 Federal Government gives no concessions in the way of
29 tax relief and the manufacturer in the Atlantic Provinces
30 must pay high taxes on what little profit he succeeds in



1 earning, without receiving in turn any compensating ben-
2 efits from the same Federal Government.

3 (b) Solution:

4 The great railway system which links the var-
5 ious Canadian provinces was financed by the taxpayers
6 of Canada as a whole and is supported by the Canadian
7 taxpayers for the good of the nation, not for the good of
8 any particular sector of the nation. However, it has
9 not worked out this way. Ontario and Quebec have
10 derived terrific benefits from the Government-owned
11 railway system, but the Atlantic region, due to the
12 increasingly high freight rates, has suffered.

13 IF ALL GOODS MANUFACTURED IN THE ATLANTIC
14 REGION FOR EXPORT FROM THE SAID REGION WERE CARRIED
15 FREE OF FREIGHT RATES TO THE QUEBEC-NEW BRUNSWICK BORDER
16 FROM THE POINT OF MANUFACTURE, AND ALL RAW MATERIALS
17 USED IN MANUFACTURING IN THE ATLANTIC REGION WERE
18 CARRIED FREE OF FREIGHT RATES FROM THE QUEBEC-NEW BRUNSWICK
19 BORDER TO THE MANUFACTURING POINTS IN THE REGION,
20 THEN, AND ONLY THEN, WOULD THE MANUFACTURING INDUSTRY
21 IN THE FOUR ATLANTIC PROVINCES BE ON A TRULY EQUAL AND
22 COMPETITIVE BASIS WITH ITS OPPOSITE IN QUEBEC AND ONTARIO.

23 (c) Observations:

24 Before dismissing the above solution as
25 impractical it would be well to consider the following
26 factors, namely:

27 That the subventions which would enable this
28 plan to be carried out would apply only on goods manuf-
29 actured in the region and moving out of the region and
30 not on the movement of goods within the region or on



1 raw materials moving out of the region. Also, only
2 raw materials used to complete a finished product
3 within the region would be affected when they entered
4 the region. At present time there is an ever decreasing
5 amount of manufactured goods moving out of the region
6 annually.

7 Also, it should be remembered that once the
8 finished product crossed the Quebec-New Brunswick border
9 it would pay full freight rates on the prevailing scale
10 to its ultimate destination from the said border, and
11 raw materials moving into the region for manufacturing
12 purposes would pay freight rates from point of origin to
13 the said Quebec-New Brunswick border.

14 The cost of such a system of subventions would
15 be greatly offset by the decrease in Unemployment
16 Insurance Benefits paid in the region, the much higher
17 collection of income taxes from employees and employers
18 alike in the region and the many other financial gains
19 derived by the Federal Government from a healthy economy.

20 There is ample precedent in our present
21 freight rate structure for such a system of subventions
22 when deemed advantageous for a particular section of the
23 economy. Subventions are paid for the movement of feed
24 grains from the Prairie Provinces and other specific
25 assistances are given to particular goods or regions in
26 Canada. The railway system in the Atlantic region at
27 the present time is not being used to anywhere near its
28 full capacity, and the increased use such a plan would
29 give to the system would not increase the total cost of
30 the railway operation in the region by such an excessive



1 amount as to be prohibitive. Rather, the cost ratio
2 would increase by a lesser amount the nearer the railway
3 system would reach full operational capacity.

4 The industrial revival which would take place
5 in the Atlantic region if such a plan were put into effect
6 would show in every sector of our economy. The demand
7 for power needed in such an industrial expansion would
8 create in turn a tremendous demand for coal which would
9 provide a ready market for our coal mines and full employ-
10 ment for our coal miners. Also, as most of the coal
11 produced in the region could then be readily used in the
12 Atlantic region, the amounts paid by the Federal Govern-
13 ment for subventions on the movement of coal would be
14 substantially reduced. The raw materials produced in
15 the region would then be used in the same area and the
16 additional money put into circulation from full indust-
17 rial employment would benefit the farmers, merchants,
18 and all sections of the economy of the region.

19 The history of the past fifty years in the
20 Atlantic region is that due to the ever-increasing
21 freight rates established industry has been in ever-
22 greater difficulties and many industries have left the
23 region and moved to Central Canada. On the other hand,
24 despite many natural attractions and the skilled labour
25 force available it has proved almost impossible to per-
26 suade new industries to locate in the region. Provincial
27 and Federal Governments have made capital available to
28 both new and established industry in the region who wish
29 to locate or expand. However, such inducements have
30 proved of little value against the geographic location



1 and the prohibitive freight rates facing those who wish
2 to manufacture and market goods on the Canadian market.

3 It is submitted that the herein outlined plan
4 would place the Atlantic region on an equal footing
5 with the rest of Canada and finally fulfill the promises
6 that were made at the time of Confederation. The great
7 vision of an equal and prosperous nation held out at
8 that time will always remain an empty mockery as long as
9 the Atlantic region is allowed to lag behind due to
10 its geographic position. The position of the Atlantic
11 provinces as the "have not" area of Canada would be
12 quickly changed if such a plan were effected and in a
13 short time the Canadian nation as a whole would benefit.

14 ECONOMIC & SOCIAL CONSEQUENCES OF THE CESSATION OF
15 MINING OPERATIONS.

16 The economic and social consequences of the
17 cessation of mining operations in any one district can
18 be clearly seen in the Town of Westville. As stated
19 previously, our Town had, a few years ago, more than
20 600 men employed in mining. Today there are less than
21 a hundred employed for a few days a week. As a consequence
22 of the Intercolonial Coal Company ceasing operation, the
23 Town of Westville lost \$15,000.00 annually in taxes and
24 \$1200.00 annually in water rates. Some two hundred
25 of the town's younger men, who were married with children,
26 had to leave the town and the province in order to make
27 a living for their families.

28 This has caused a rise in the tax rate from
29 7¢ on the dollar to 9.5¢, which is paid in the most part
30



1 by the home owners and is a heavy burden. About half
2 of the best homes in Westville are owned by old age
3 pensioners and widows, with the net result that the
4 town cannot hope to get enough revenue to meet the bare
5 maintenance costs. The town cannot sell debentures,
6 borrow money, or raise money from any public source.
7 Real property values are going down each year, causing
8 a further loss in revenue. It is almost impossible
9 for anyone to sell real property in the Town of Westville
10 and none of the Provincial Mortgage Companies will loan
11 money on real estate in the said town. As a net result,
12 the town is rapidly going bankrupt and no solution can
13 be seen by the town Council unless either a new coal
14 mine is opened to utilize the abundant supply of coal
15 available, or industries of some type are established
16 which in turn will create a demand for coal.

17 Conclusions

18 We would like to have independent research
19 relative to costs and potential markets for improved
20 coal in the form of pellets or chemical breakdown similar
21 in purpose to that applied to low grade ore, whereby
22 a higher BTU content might be attained, or a predetermi-
23 ed chemical content so that the refined product might
24 be used as a special fuel in industry, or in a more refined
25 state might be more acceptable as a domestic fuel.

26 Public preference has changed very rapidly
27 in the past twenty years in regard to fuel, and the
28 industry is still offering substantially the same
29 products to a clientele that has become actively inter-
30 ested in other fuels.



1 We would also recommend a broad survey of
2 changes made in other countries where the coal industry
3 is undergoing a transition period similar to ours.

4 We are convinced that coal, as an element of
5 power or as a source of valuable by-products, has a
6 future in our economy, but as long as the industry in
7 this province is dominated by one large corporation
8 that has many more lucrative interests, and as their
9 corporate structure requires extraordinary overhead
10 costs, we cannot look to them to guide us out of the
11 wilderness of corporation policy, market service, re-
12 search information or possible improved or refined
13 products.

14 We are the people who are victims of circum-
15 stances beyond our control, and we would like to get up-
16 to-the-minute information without prejudice of company,
17 government, politician, or individual, but rather a
18 report of actual circumstances as they pertain to this
19 element "coal".

20 With this information we could then direct
21 our efforts toward creating a future for our people
22 using this element as a basis or be convinced that our
23 future livelihood will have to come from other pursuits.

24 If the latter choice is indicated, then an
25 industrial environment will have to be created that
26 will be conducive to financial returns for risk capital,
27 more attractive than in the past, and sufficiently well
28 based, that capital can be invested with the assurance
29 that conditions so created will not be changed for
30



1 political advantage or expediency.

2 Many of our industries have been long estab-
3 lished and have been depreciated to the point that a
4 profit is shown only because the book value for deprec-
5 iation purposes is so far below replacement values.

6 In large measure, these are the Maritime
7 industries to which we point with pride, and convince
8 ourselves that business and industry can prosper in the
9 Maritime Provinces.

10 In many cases, however, if replacement values
11 were used in capital structure the profit after deprec-
12 iation would not exist.

13 In a new industry the capital structure would
14 be on present-day costs, and allowing for depreciation
15 and replacement they cannot be shown to be as attractive
16 to capital as bonds or securities in government or long
17 established industry in other areas.

18 In large measure, in the Maritime Provinces
19 fixed assets are not negotiable as securities for loans
20 and fixed assets must be financed out of profits or
21 with borrowed capital.

22 Bank loans are made chiefly on liquid assets
23 and long term financing is available only at very high
24 money costs, or on the condition of personal guarantees
25 by the directors of the company borrowing.

26 If there is a sincere desire on the part of
27 the Federal Government to alleviate our difficulties,
28 they will have to acknowledge that the Atlantic Provinces
29 cannot keep pace with the rest of Canada until:
30



1 (1) The geographic barrier is removed from
2 industry by the equalization of freight rates as sub-
3 mitted heretofore.

4 (2) We should not be required to pay American
5 prices for manufactured goods, plus import duty, plus
6 transportation costs from Quebec and Ontario unless we
7 have a compensating financial advantage.

8 (3) The Federal Treasury levies up to 50% on
9 the profits derived from the few successful enterprises
10 we have in the Atlantic Provinces; therefore at least a
11 substantial portion should be returned in the form of
12 active assistance and betterment of the industry con-
13 cerned. It should be kept in mind that taxes are paid
14 by employees as well as industry and, at least in the
15 Atlantic Provinces, it should be returned to foster
16 industry that does not benefit from our tariff structure.

17 (4) The solution to our problem is going to come
18 only when all parties concerned face reality and person-
19 al and political consideration are entirely removed from
20 the subject.

21 (Sgd.) Alfred L. Matheson
22 Mayor,

23 Westville, Nova Scotia.

24 MR. MATHESON: I might point out, a little off
25 the record, in regards to this Westville mine which you
26 have already heard about, and which some people say they
27 are not too sure whether the coal is there in quantity
28 or in quality, I would like to point out, sir, that the
29 Intercolonial Coal Company tried to get an extension of
30 their lease, they wanted that coal.



1 THE CHAIRMAN: Did you make representations
2 at the time to the Government?

3 MR. MATHESON: We did.

4 THE CHAIRMAN: It was considered by the
5 Government of the Province?

6 MR. MATHESON: It is still being considered
7 by the Government of the Province, but Dosco is asking
8 far too much for it, and they have as yet not shown any
9 desire to relinquish the lease.. I know very well that
10 it will be very hard to get business men in Pictou
11 County to organize a new company to go into that main
12 seam as long as Dosco has anything to do with it. That
13 company had every intention to develop that seam. They
14 knew the coal was there, and they had the plans, and if
15 you will allow me I will show you the plans they had
16 made to go into that seam, and it is the best coal in
17 North America.

18 THE CHAIRMAN: Are you familiar with the
19 eastern section of Quebec and the lower St. Lawrence?

20 MR. MATHESON: I am just a coal miner.

21 THE CHAIRMAN: I was just wondering why,
22 situated at the boundary between New Brunswick and
23 Quebec, we see very much mixed industry on the eastern
24 section of Quebec.

25 MR. MATHESON: You see much more today than
26 twenty or thirty years ago.

27 THE CHAIRMAN: Are you familiar with it?

28 MR. MATHESON: Not too familiar, no.

29 THE CHAIRMAN: How can you say that?

30 MR. MATHESON: I do know that Quebec and



1 Ontario, under the present system ---

2 THE CHAIRMAN: I am just dealing with your
3 proposal to remedy the situation by commencing at the
4 Quebec boundary to pay freight rates, and I think if
5 that were so, you would see a tremendous establishment
6 of all sorts of industry in Quebec.

7 MR. MATHESON: Perhaps you would.

8 THE CHAIRMAN: You do not see it, do you?

9 MR. MATHESON: You will see it before too
10 long.

11 THE CHAIRMAN: We can all make speculations.

12 MR. MATHESON: And you will see more in all
13 the Atlantic Provinces. I submit one of the reasons
14 is the policy they had adopted that any raw materials
15 taken out of Quebec will be processed in Quebec.

16 THE CHAIRMAN: Are there any questions?
17 Thank you Mr. Matheson.

18 THE SECRETARY: Mr. Commissioner, I would
19 like to call upon Mr. John Roach who will present a
20 brief on behalf of the United Mine Workers of America,
21 for Locals in the Pictou County. This will be Exhibit
22 No. 25.

23 MR. ROACH: Mr. Chairman, ladies and gentle-
24 men, this is a brief submitted by Local 8672, Thorburn,
25 Nova Scotia, President James A. Murphy, Secretary,
26 Ronald J. Brennan; Local 4481, Stellarton, Nova Scotia,
27 President John W. MacPherson, Secretary Francis Trefrey.

28 I am sorry that our President is not with
29 us today, but we have other members here. We do not
30



1 want to conflict with our district brief. The master
2 brief will be given to you from our district report in
3 Sydney.

4 Brief to the 1959 Royal Commission on Coal
5 From the U.M.W. Locals in Pictou County N.S.

6 Coal has been and should continue to be the
7 Country's basic fuel and principal source of energy.

8 During World War II, coal was declared a
9 national emergency and miners frozen to their jobs. In
10 the event of another conflict coal would again become
11 part of our national defence.

12 For this reason every mine that is operating
13 should be maintained and new ones developed. Coal
14 mining, unlike other industries cannot be abandoned
15 and reclaimed in the event of an emergency.

16 Higher tariffs should be placed on foreign
17 fuels, especially cheap residual oil coming in from
18 Venezuela and other parts of South America, displacing
19 markets for Canadian coal.

20 More electric power should be produced by
21 coal, especially in Eastern Canada in order to attract
22 secondary industry and thus further the use for coal.

23 An extensive study should be made into other
24 uses of coal, such as experimental plants built near
25 coal areas to extract the by-product of coal.

26 A survey should be taken to determine the
27 rates charged by subsidiary suppliers to the mines,
28 such as steel and other plants controlled by Dominion
29 Steel and Coal Company.
30



1 Dosco should be asked to streamline their
2 sales departments and instead of independent agents
3 handling coal in the various areas, Dosco would maintain
4 the service themselves at a lower rate to the consumers.

5 Coal should be sold on a budget basis, so
6 that homeowners could spread their fuel costs over a
7 period of months.

8 Immediately a mine should be opened in the
9 Pictou County area in order to provide domestic users
10 with ample supplies, and thus prevent the change to oil.

11 Coal burning central heating plants should
12 be encouraged in all housing projects.

13 The Federal Government in this session should
14 enact a National Fuel Policy to protect our industry.

15 Economically and socially, where mining has
16 ceased operations, a town becomes a depressed area,
17 causing hardship on citizens who must maintain homes,
18 schools, churches and the town, and leaving many miners
19 in the age groups of 40 - 65 jobless and hopeless.

20 Areas such as Stellarton, Westville and
21 Springhill are found in this situation at the present
22 time.

23 The Government of the country should see that
24 industries be established in these areas, and in the
25 future have new industries established before any
26 closure of our mines.

27
28 January 1960.

29 Thank you, Mr. Chairman.

30 THE SECRETARY: Mr. Commissioner, there are



1 no further briefs this afternoon.

2 THE CHAIRMAN: Are there any other statements
3 to be made to the Commission? If not the hearing is
4 ended for this city.

ROYAL COMMISSION

ON

COAL

UNCORRECTED TRANSCRIPT
Royal Commission on Coal(1959)

HEARINGS

HELD AT

SIDNEY
Nova Scotia

VOLUME No.:

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I N D E X

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Provincial Government of Newfoundland
Mr. Arthur Johnson

1-15

Dominion Coal Company Limited

Mr. A. L. Fairley

Mr. Harold Gordon

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ROYAL COMMISSION ON COAL (1959)

Proceedings of hearings of the
Royal Commission on Coal, held at
North Sydney, Nova Scotia, on the
16th, 17th and 18th days of March,
1960.

THE HONOURABLE I.C. RAND, Q.C. Chairman.

DR. A. E. CAMERON, Technical Advisor
to the Commission.

W. A. DUNN, Q.C. Commission Counsel.

W. KEITH BUCK, Secretary.

J. J. ELLIS, Administrative Officer.



BM
ch 16

2
3 MR. ELLIS: Gentlemen, may we come to
4 order, please. Mr. Commissioner, I would like to call
5 firstly upon Mr. Arthur Johnson who will submit a
6 brief on behalf of the Provincial Government of
7 Newfoundland. This brief will be
8 recorded in our records as Exhibit No. 26.

9 THE CHAIRMAN: Mr. Johnston.

10 MR. JOHNSTON: Mr. Commissioner, if it
11 pleases you, sir, I would like to interject as I go
12 along. Is that permissible?

13 THE CHAIRMAN: Yes indeed.

14 MR. JOHNSTON: First of all as President of
15 APEC, I would like to say to you, sir, that APEC
16 thinks that the immediate and most logical place
17 to market Atlantic Coal is in the Atlantic Provinces,
18 and we think that Newfoundland is one of the very
19 obvious markets for Cape Breton Coal and one which is
20 a ready and available market and which we think
21 should be fostered and encouraged as much as possible.

22 On behalf of the Government of the Province
23 of Newfoundland, I would like to make this submission.
24 The people of Newfoundland are vitally interested in
25 the procurement of domestic coal from Cape Breton.
26 The Province of Newfoundland has a real desire to
27 use Cape Breton coal rather than United States coal.
28 While United States coal has many advantages, the Province
29 of Newfoundland is a firm believer in supporting the
30 economy of the Region made up of the four Atlantic
Provinces. In addition many miners of Newfoundland



1
2 extraction work in Cape Breton. Coal transport from
3 Cape Breton provides work for Newfoundland coasters
4 and their seamen. Cape Breton coal also has the
5 advantage of being available for direct shipment
6 in the small quantities required for the Newfoundland
7 Outport trade."

8 "The quality of coal needed is "Domestic
9 North Sydney Washed". Apart from this there is
10 a quantity of "industrial" coal for DOSCO's own
11 operations at its iron ore mines on Bell Island,
12 Newfoundland, and also a quantity for the Thermal-
13 Electric plant at Gander .

14 200,000 TONS

15 The amount required by Newfoundland is
16 something in the nature of 200,000 tons a year.

17 Newfoundland is probably unique in that its
18 total annual consumption of coal so far has remained
19 steady through the years. This is due partially
20 to the fact that much coal is used in the Outports as
21 a supplement to wood, and, as the forests are cut
22 back from the settlements, the usage of coal increases.

23 While oil is being used in increasing
24 quantities, because of the foregoing, the demand for
25 Coal still remains fairly steady.

26 THE CHAIRMAN: I was wondering to what
27 extent have you wood supplied?

28 MR. JOHNSTON: Still considerable supply.
29 The coastal area is reserved for domestic wood cutting
30 you see.

THE CHAIRMAN: What kind of wood do you



1
2 raise?

3 MR. JOHNSTON: Fir and Spruce.

4 THE CHAIRMAN: You have no hardwoods?

5 MR. JOHNSTON: We have birch, but nothing
6 else. That is virtually the only hardwood. The
7 usage of oil, of course, is increasing but because
8 of this mixing of coal and oil the supply pretty
9 well keeps steady. That is, in the cities the
10 amount of coal being used is less and less, but in
11 the Outports it is still being used and increasing,
12 so that in the small Outports the supply is quite
13 steady and it keeps the total quantity about the
14 same.

14 OUTPUT

15 Extreme difficulties have existed in getting
16 the desired quality of coal from Cape Breton at
17 the time of the year when it is required.

18 THE CHAIRMAN: You do not have any
19 summer shipments for storage?

20 MR. JOHNSTON: We have been working on
21 that sir. If you do not mind, I will develop
22 that just a little later. I knew that would be
23 on your mind.

24 Part of our troubles is the bottleneck of
25 the Washing Plant. The washing Plant on the
26 north side is quite small and another is definitely
27 necessary at Sydney if we are to be able to keep
28 pace with Newfoundland's normal demands. Unwashed
29 screened coal is accepted only with extreme reluctance
30 because it is dirty at all stages to handle, and
is wasteful. In fact, most dealers will not accept
it under any condition.



1
2 There are a lot of little angles on this
3 thing. I have an aunt who lives in the Outport,
4 who used coal along with her wood, and when they get a
5 schooner cargo of coal, a mixed of coal then
6 usually there has been washed coal to start off with
7 and then the unwashed coal at the tail end of it,
8 and the trick there is to watch the men coming
9 back from unloading the vessel. When they are
10 dirty, you don't take the coal. When they come
11 home with clean faces, you know you are down to
12 the North Sydney Wash, and that is the time you
13 order your coal. So you can see our demand is
14 for the washed coal.

14 OCTOBER-NOVEMBER DELIVERY

15 The demand for coal for Newfoundland comes
16 principally in October and November. There are a
17 number of reasons for this: The North East and
18 North West coasts of Newfoundland are blocked with
19 ice for the winter months, and this necessitates
20 getting in stocks before freeze-up. In some cases
21 premises are used for fish until October, and only
22 after the fish has been shipped can they be used for
23 coal. There is also the factor that no one likes
24 to tie up money for stocks of winter coal longer than
25 is necessary.

26 So we have all these difficulties, and that
27 is why our people get coal at a specified time.

27 LONG DELAYS

28 It is impossible, with the present facilities on
29
30



1
2 the North Sydney side for washing coal, to provide
3 Newfoundland with its requirements.

4 In past years this has resulted in vessels
5 encountering many days of delay when calling for
6 coal at North Sydney. This has resulted, as you
7 can well imagine, with vessels being lined up,
8 delayed, waiting for coal and they cannot give it
9 to them so you get a lineup of vessels. In the
10 past, they have been waiting sometimes two or three
11 weeks until we took these extraordinary steps this
12 last year and many of these vessels, unless we
13 repeat the procedures that we are doing now, went
14 back without coal at all and a lot of the Outports
15 were left without coal, or with very very little coal.

16 For several years the Province of New-
17 foundland has had to provide, at its own cost, a
18 Liaison Officer at North Sydney who has done his
19 best to regulate the traffic and to try and obtain
20 what coal he could for the Newfoundland vessels.

21 During the past year a very high degree of co-
22 operation has been received from DOSCO because of
23 the personal interest of its President, Albert
24 L. Fairley Jr.

25 To offset the slowness of supply of washed
26 coal, the following steps have been taken:

27 (1) An intensive effort was made, both on
28 the part of the Company and the Province of
29 Newfoundland to induce dealers and vessels
30 to come for coal during the summer and early
fall.

Last year we started in the summer so that



1
2 we strung out our vessels, and by that we were
3 really able to keep them all in supply, and the
4 company also extended credit to reputable coal deal-
5 ers who would accept their requirements during
6 the summer. That was a great help. We received
7 every co-operation from Mr. Fairley and Mr. Appleton
8 and the Cape Breton Staff. They put in what is
9 known as a wedge sir, which you no doubt have
10 seen, and that resulted in a greater percentage of
11 domestic size coal.

12 (2) The Company extended credit to
13 reputable coal dealers who would accept their
14 requirements during the summer.

15 (3) The Liaison Officer at North Sydney was
16 employed again by the Province.

17 (4) A keen personal interest in the New-
18 foundland movements was exercised by Mr. Fairley, and
19 Vice-President Charles W. Appleton, and

20 (5) An alteration of mining machinery was
21 effected by the Company to ensure a greater percentage
22 of domestic size coal.

23 THE CHAIRMAN: Have you noticed the
24 effect of that?

25 MR. JOHNSTON: It means that more
26 domestic coal is produced; more of the coal that
27 we want, of that variety, and less industrial slack
28 less fines, and we have been able to get a much
29 greater supply; been a tremendous help to us.

30 It can be realized readily that the battle
between Oil and Coal as fuel is not helped when coal



1
2
3 is not obtainable as required, and when such
4 extraordinary measures have to be taken by the
5 Customers themselves and by their Province.

6 Naturally if a customer finds great
7 difficulty in getting coal, he is going to turn to
8 oil. If he turns to oil the coal market is lost.
9 It is remarkable we have been able to hold out as
10 long as we have.

11 RECOMMENDATION

12 It is therefore recommended that immediate
13 steps be taken at Cape Breton by providing a loan or
14 other assistance to the Corporation to set up a
15 washing plant and adequate facilities for loading
16 the steamers and coasting vessels with the required
17 quality of coal at the time best suited to the
18 customers in Newfoundland.

19 We think under the present system, the
20 extension of the present system and with better
21 washing facilities we can definitely hold this market
22 for Cape Breton, which we certainly want, and as
23 far as Newfoundland is concerned sir our recommendation
24 is that immediate steps be taken at Cape Breton.

25 THE CHAIRMAN: I was just wondering,
26 what are the arrangements for sending coal to the
27 Outports?

28 MR. JOHNSTON: Mostly in small vessels;
29 practically all in small vessels.

30 THE CHAIRMAN: Have they any storage
facilities in those ports?



1
2 MR. JOHNSTON: Yes, there will be a dealer
3 or two dealers or three dealers in each of the
4 Outports, and he will sell coal to the people.

5 THE CHAIRMAN: What would be the
6 average population of the Outports?

7 MR. JOHNSTON: Anywhere from 250 upwards.

8 THE CHAIRMAN: I suppose they have been
9 using this coal for years?

10 MR. JOHNSTON: Yes, North Sydney Coal
11 is a tradition with Newfoundland. It is a very
12 satisfactory coal.

13 THE CHAIRMAN: When did they begin to
14 wash it?

15 MR. JOHNSTON: That I don't know sir.
16 Some years.

17 THE CHAIRMAN: Yes but not back as far
18 as coal had been used in Newfoundland?

19 MR. JOHNSTON: No. The washing and
20 cleaning of coal has been a great factor in helping
21 the market.

22 THE CHAIRMAN: I suppose it had a market
23 because there was nothing else.

24 MR. JOHNSTON: To a very large extent,
25 yes.

26 THE CHAIRMAN: What extent has oil been
27 introduced?

28 MR. JOHNSTON: To a very large extent,
29 I would say. Well, St. John's as far as using oil
30 and Corner Brook and all those bigger centres are
exactly the same as the Mainland here.



1
2 THE CHAIRMAN: Well now when you speak
3 about using domestic, you mean in homes?

4 MR. JOHNSTON: In homes, yes.

5 THE CHAIRMAN: And not in any form of
6 industrial, particularly?

7 MR. JOHNSTON: There are still some
8 industries in some places who are using coal, but
9 not too many. There are very few.

10 THE CHAIRMAN: Does the Government follow
11 the policy of using Canadian Coal within limits?

12 MR. JOHNSTON: Yes.

13 THE CHAIRMAN: You have imported no
14 American Coal then, have you?

15 MR. JOHNSTON: We got some in when we
16 couldn't get North Sydney Coal.

17 THE CHAIRMAN: When you say "North
18 Sydney" is that resulting from an analysis of the
19 coal and its burning qualities, or is that the
20 kind you have been accustomed to?

21 MR. JOHNSTON: It was both sir. Both
22 an analysis of the coal, and the kind we like. We
23 always burn North Sydney Coal in preference to
24 American Coal, although the American Coal is very
25 satisfactory.

26 THE CHAIRMAN: What about the North
27 Sydney Coal as a characteristic, or as a descriptive
28 term? Do you attribute certain particular
29 qualities to it?

30 MR. JOHNSTON: Yes. It is a good hot
coal, very satisfactory.



1
2 THE CHAIRMAN: Would you know the
3 difference between a mine producing North Sydney
4 Coal? I am not exactly familiar with what

5 seam of the mine you are aiming at.

6 MR. JOHNSTON: Well, that is a very
7 good point sir. The two seam on the north
8 side and the south side come together and I firmly
9 believe myself it is the same coal, to some extent.

10 THE CHAIRMAN: So it is a custom of
11 extending --

12 MR. JOHNSON: The seam of the Sydney
13 side and the North Sydney side is undoubtedly the
14 same coal.

15 THE CHAIRMAN: The situation would be
16 to extend the scope of the name?

17 MR. JOHNSON: It doesn't make any difference.
18 I don't think they know the difference between
19 the Sydney Washed and the North Sydney Washed unless
20 somebody told them.

21 THE CHAIRMAN: Are you able to
22 specify--

23 MR. JOHNSON: No sir, not able to
24 specify.

25 THE CHAIRMAN: What are the qualities
26 that seem to be objectionable?

27 MR. JOHNSON: Well all we want is a
28 good hot coal, and the North Sydney Coal is a good
29 hot burning coal.

30 THE CHAIRMAN: That is high B.T.U.'s

MR. JOHNSON: That is right. It is a little



1
2 dirty, but that doesn't make any difference.

3 THE CHAIRMAN: I was just wondering about
4 the dirt. I remember many years ago we didn't know
5 anything about washing coal in some parts of the
6 Mainland.

7 MR. JOHNSON: No sir.

8 THE CHAIRMAN: They burned the coal
9 as it came; run of mine.

10 MR. JOHNSON: Yes sir.

11 THE CHAIRMAN: I suppose we get more
12 particular about those features now.

13 MR. JOHNSON: I think sir, if you take
14 run of mine on a machine coal, you don't get very
15 fancy coal.

16 THE CHAIRMAN: Is any of this two hundred
17 thousand, or what, if any, percentage is used in homes
18 as distinct from say apartment houses or business
19 blocks or industrial?

20 MR. JOHNSON: No sir, I can't tell you
21 that, but the Company could tell you how much they
22 shipped to Bell Island and how much they shipped
23 to Gander and I would say apart from that it is
24 practically all domestic coal.

25 THE CHAIRMAN: What is the fuel used
26 at Corner Brook?

27 MR. JOHNSON: Mostly oil. Corner Brook is
28 a different proposition. Corner Brook is a Company town,
29 and the way they work it is they ship paper down to
30 the States and bring back American Coal as ballast

THE CHAIRMAN: Do they?



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MR. JOHNSON: Yes.

THE CHAIRMAN: What is the quantity they import there?

MR. JOHNSON: That again sir I would not be able to tell you offhand. That is a town of about eighty-thousand people; a fairly large percentage.

THE CHAIRMAN: No Provincial Statistics to show that?

MR. JOHNSON: No.

THE CHAIRMAN: It is subject to a duty of 50¢ a ton?

MR. JOHNSON: Yes, that is right.

THE CHAIRMAN: What about the Bureau of Statistics?

MR. JOHNSON: Oh you can get that sir if you want to go looking for it, but we wouldn't have the figures. They would be obtainable. You would get those from the customs at the Port of Entry but we are very anxious sir to burn Cape Breton Coal, and we will go to any length to get it sir, as you can see.

THE CHAIRMAN: Evidently they have adopted some arrangement of having some coal at least shipped in the summer time.

MR. JOHNSON: That is right.

THE CHAIRMAN: What percent?

MR. JOHNSON: Again sir I couldn't tell you. I have some records. I didn't bring them all with me. The percentage has greatly increased.



1
2 Very much so. Very satisfactory. They had no
3 trouble at all. There was no waiting at all
4 this year except that it is hardly fair to ask
5 us to provide a Liaison Office and we really do
6 quite a job on it.

7 THE CHAIRMAN: I see that in 1957 you
8 imported from the United States fifty-two thousand
9 tons of bituminous, as against one hundred and
80 thousand Canadian bituminous.

10 MR. JOHNSON: There is very little now,
11 since we have been getting our coal on time but at
12 that time sir because American Coal was \$2.50 cheaper.

13 THE CHAIRMAN: In 1958 I see that was
14 cut to twenty-thousand.

15 MR. JOHNSON: That is right.

16 THE CHAIRMAN: Although the importation
17 of the Canadian was one hundred and fifty-six.

18 MR. JOHNSON: We had a very bad winter.

19 THE CHAIRMAN: In 1958?

20 MR. JOHNSON: Very heavy ice conditions;
21 was virtually none shipped. What didn't get out
22 in November just stayed there.

23 THE CHAIRMAN: That is a warning to get
24 some in before .

25 MR. JOHNSON: It was a help sir.

26 The other thing sir it is a side issue,
27 I don't know if you are really concerned with it,
28 but these coasters that are coming to North Sydney
29 for coal, they do quite a bit of purchasing right
30 here in Cape Breton. It is quite a help to the



1
2 Cape Breton economy. They will come and pick
3 up small lots, almost deck loads, you know, twenty,
4 thirty forty tons of coal and pick up supplies
5 at the same time. Quite an effective trade in between.

6 THE CHAIRMAN: Approximately how many
7 of these what you call Outports are there, around
8 the Island? Just roughly?

9 MR. JOHNSON: Thirteen hundred.

10 THE CHAIRMAN: What percent of the total
11 population of the Island --

12 MR. JOHNSON: Would be in these?

13 THE CHAIRMAN: In the Province.

14 MR. JOHNSON: In the Outports I would
15 say sir, I would venture to say about thirty percent
16 possibly.

17 THE CHAIRMAN: What is the present
18 population of Newfoundland?

19 MR. JOHNSON: Four hundred and fifty-three
20 thousand. St. John's has about eighty - thousand,
21 Corner Brook about twenty-five thousand and Grand Falls
22 would be in the vicinity of around about twenty.

23 THE CHAIRMAN: So you have a substantial
24 population that looks for coal?

25 MR. JOHNSON: Yes.

26 THE CHAIRMAN: Is all of this area
27 of Outport electrified?

28 MR. JOHNSON: Some of it. We have
29 quite a rural electrification programme and they are
30 gradually being electrified.



1
2 THE CHAIRMAN: Unless there are some
3 questions to put to Mr. Johnson, thank you Mr.
4 Johnson.

5 MR. JOHNSON: Thank you very much sir.
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THE SECRETARY: I would like to call upon Mr. A. L. Fairley who will present a brief on behalf of the Dominion Coal Company Limited. This brief will become Exhibit No. 27.

SUBMISSION BY
DOMINION COAL COMPANY LIMITED

APPEARANCES:

Mr. A.L. Fairley,
Mr. Harold Gordon
Mr. Rand Matheson
Mr. Charles Appleton

MR. FAIRLEY: We are pleased to have the opportunity of appearing before this Commission to express our views with respect to the state of the bituminous coal industry and its future outlook in Canada, particularly insofar as it concerns this Company.

For more than two centuries, bituminous coal has been one of the primary sources of heat and power for the major nations of the world; however, during the past decade, the coal industry throughout the world, and Nova Scotia is no exception, has carried on a losing struggle to resist the inroads of competing sources of energy. Oil and Natural Gas have progressively succeeded in displacing coal in Canada. Hydro Electric power, which is in abundance



1
2 in the Province of Quebec, has provided further com-
3 petition.

4 The use of alternative forms of fuel and
5 energy has created drastic cut-backs in production in
6 coal mining throughout the world and this is evidenced
7 by huge coal stockpiles and widespread unemployment
8 in the mining communities of the United Kingdom and
9 Europe, as well as in the United States and Canada.
10 In this connection, it is of importance to recall
11 the Urwick Currie Report to the Royal Commission
12 on Canada's Economic Prospects in 1956 concerning
13 the Nova Scotia coal industry reported at Page 21,
14 "The surplus of coal over the established demand is likely
15 to reach sizable proportions in 1959 at a time when
16 the impact of the St. Lawrence Seaway may begin
17 to be felt and the Ontario and Quebec market can be
18 expected to be receiving supplies of Natural Gas
19 at highly competitive prices." This has been borne
20 out and, as a matter of fact, approximately 2,000,000
21 tons of our coal have already been displaced by
22 other competitive energy sources.

23 Unfortunately, the position of Nova Scotia
24 coal has not been made easier in today's competitive
25 markets because of its high production costs which have
26 increased approximately 40% within the last ten years.
27 This is in spite of substantial sums spent on
28 mechanization. In contrast, American coal costs
29 have remained practically constant in the same period.

30 In 1944, some 36 million tons of bituminous
coal were consumed in Canada. Of that amount, 12
million were produced by mines in this country. Another



24 million tons were imported. Of the total amount, Dominion Coal Company mines produced five million tons, which means that we enjoyed some 14 per cent of the entire Canadian coal market.

However, by 1958 Coal consumption in Canada had dropped to 19.5 million tons. This indicates a shrinkage of about 40 per cent. Of that 19.5 million tons total, U.S. coal represented 11.8 million tons. Of the remaining 7.7 million tons, which was Canadian coal, our coal represented close to 4.5 million tons.

These figures indicate that Nova Scotia coal in 1958 represented some 22 per cent of all the bituminous coal used in Canada. In other words, Nova Scotia's participation between 1944 and 1958 has gone up from 14 per cent to 22 per cent of the total bituminous coal consumed in Canada, although tonnage supplied actually went down.

Most of our coal operations are carried on my Dominion Coal Company, Limited, excepting Old Sydney Collieries and Acadia Coal, which are owned by Dominion Steel and Coal Corporation, Limited. Consequently, whatever applies to the coal operations of Dominion Coal Company, Limited applies to the mines owned by Dominion Steel and Coal Corporation, Limited.

The Brief is divided into three major parts, namely - Part I, Production; Part II, Transportation; and Part III, Marketing, with Summary and Conclusions.



1
2 I would like to call on Mr. Harold
3 Gordon, Vice-President, Dominion Coal Company Limited,
4 to present that section of the brief that deals
5 with production and its problems.

6 MR. HAROLD GORDON: Coal fields in
7 the Province of Nova Scotia are located in Cape
8 Breton and Inverness Counties on Cape Breton
9 Island, and in Pictou and Cumberland Counties on the
mainland.

10 At the present time the Dominion Coal
11 Company, Limited, Old Sydney Collieries and Acadia
12 Coal carry on mining operations in the Pictou
13 field and in the Sydney field of Cape Breton County,
14 the latter being the largest and most important coal
15 field in the Province.

16 The Sydney coal field extends from Mira
17 Bay in the south-east to Kelly's Mountain in the
18 north-west, a distance of 35 miles. In the easterly
19 direction it is terminated against rocks of older
20 age, while in the westerly direction it is terminated
21 by the Kelly Mountain fault. The coal seams
22 crop along the seacost and dip seaward at a pitch
23 of about 10%, although the pitch varies considerably
24 in local areas and in some places exceeds 30 degrees.
25 The field is quite regular and contains few faults but
26 its contours are changed locally by a number of
anticlinal folds, which run in a northeasterly
direction.

27 The seams lie between strata made up very
28 largely of shales and fireclays. The remainder
29
30



1
2 are weak sandstones. The strata are, for the most
3 part, thin bedded. The shales are weak and will not
4 remain in position without support. The seams, as
5 they exist in the various synclinal folds, are as
6 undernoted.

7 You will notice, Mr. Commissioner, that
8 there are four different synclinal basins shown in
9 the table below with the local names of the seams
10 in those basins shown as co-related one with the other.

11 THE CHAIRMAN: Would you explain this
12 briefly.

13 MR. GORDON: In the Marien Basin the
14 top seam is the Blockhouse, which is shown as Harbour
15 in the Glace Bay Basin, and Victoria in the Lingan
16 Basin at New Waterford, and the Sydney Main or Sydney
17 Mine. That seam, under those names, exist right
18 across the field.

19 THE CHAIRMAN: That goes right across
20 that line, Blockhouse, Harbour, Victoria and the Main
21 Seam?

22 MR. GORDON: Yes.

23 THE CHAIRMAN: That gives the thickness?

24 MR. GORDON: This measurement gives the
25 average thickness of that particular seam in the Basin.

26 THE CHAIRMAN: Yes. Those on the left are
27 the names of the synclinal folds?

28 MR. GORDON: The one at the top.

29 THE CHAIRMAN: What about the lower
30 part?

MR. GORDON: The Hub is way up in



1
2 Glace Bay. It doesn't appear at Morien Basin.

3 THE CHAIRMAN: But that is one of those
4 synclinal folds, is it? You use the word "the seams,
5 as they exist in the various synclinal folds, as are
6 undernoted", so these are descriptions or names of
7 the various synclinal folds?

8 MR. GORDON: The Morien Syncline,
9 Glace Bay Syncline, the Lingan one and Sydney Mines.

10 THE CHAIRMAN: Yes, that is it. I see.

11 MR. GORDON: The Hub seam, for instance,
12 is the top seam known in the Glace Bay Basin. It
13 does not occur in Morien Basin.

14 THE CHAIRMAN: And then you go down,
15 I see. And in Sydney Mines Basin, Cranberry Head
16 is the Seam?

17 MR. GORDON: That is right. And it does
18 not appear in the other basin.

19 THE CHAIRMAN: Yes. I understand that.
20 What about the second portion of the description?
21 The Strata?

22 MR. GORDON: That is the thickness of
23 the stone between the seams. For instance, the
24 Blockhouse in the Morein is an eight foot seam. There
25 is Strata intervals of 570 feet, and you come to
26 Gowrie, which has a 5 foot seam.

27 THE CHAIRMAN: I see.

28 MR. GORDON: In the Glace Bay Basin you
29 have Harbour which is equivalent to Blockhouse and
30 you have a Strata interval of 250 feet.

THE CHAIRMAN: Just a moment now. In



1
2 going down Glace Bay, you see Strata 250.

3 MR. GORDON: Yes.

4 THE CHAIRMAN: Would that refer to
5 the Hub?

6 MR. GORDON: No.

7 THE CHAIRMAN: You have a Hub 4 feet
8 7 inches?

9 MR. GORDON: That is right.

10 THE CHAIRMAN: That is the thickness of
11 the Hub Seam? That is the top seam?

12 MR. GORDON: Yes.

13 THE CHAIRMAN: Then there is the Strata?

14 MR. GORDON: That is the amount of stone
15 between the bottom of the Hub Seam and the top
16 of the Harbour Seam.

17 THE CHAIRMAN: I see. That is clear
18 now. When you begin below with the word "Strata"
19 what does that represent?

20 MR. GORDON: That is the Strata between
21 the pavement of the Harbour seam and the roof
22 of the Boutilier Seam.

23 THE CHAIRMAN: The Boutilier Seam is
24 an independant seam in the Glace Bay Basin.

25 MR. GORDON: Yes, sir.

26 THE CHAIRMAN: Why is the line there?

27 MR. GORDON: Because that is the main
28 seam that is co-related right across the whole field.

29 THE CHAIRMAN: That is the Harbour?

30 MR. GORDON: That is the Harbour.

THE CHAIRMAN: What is the Boutilier?



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MR. GORDON: What is it? It is a thin seam. It shows up as 3.9

THE CHAIRMAN: It is not a scope, extent of the Harbour?

MR. GORDON: NO.

MR. CHAIRMAN: None of these below the line ---

MR. GORDON: They appear in one basin and not in the other.

THE CHAIRMAN: Oh yes, they do. But I mean they are all seams ?

MR. GORDON: Oh, yes.

THE CHAIRMAN: The Boutilier Seam, the Black Pit and, Phalen, their relations to Harbour is shown by the Strata?

MR. GORDON: Yes.

THE CHAIRMAN: And they don't have that horizontal scope of the Harbour?

MR. GORDON: That is true, sir.

THE CHAIRMAN: So they are limited in area?

MR. GORDON: That is right. The Harbour Seam or the Seam known as Harbour in the Glace Bay Basin is the most continuous Seam in the whole field.

THE CHAIRMAN: I see. And those below that line are below the Harbour?

MR. GORDON: That is right.

THE CHAIRMAN: And the depth below is indicated by the word "Strata"? Is their horizontal area significant at all, or have some of them been worked out?



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MR. GORDON: Yes, some of them have been very largely worked out. None of them completely.

THE CHAIRMAN: Would you prefer to make this statement sitting?

MR. GORDON: Just as you wish.

THE CHAIRMAN: Just as you prefer.

MR. GORDON: It doesn't matter. I would just as readily stand. Does that explain -

THE CHAIRMAN: Yes, that explains it.

<u>Morien Basin</u>	<u>Glace Bay Basin</u>	<u>Lingar Basin</u>	<u>Sydney Mines Basin</u>
			Cranberry Head 3'7"
			Strata 250'
			Lloyd's Cove 3'9"
			Strata 270'
			Chapel Point 3'2"
			Strata 320'
			Main Seam 4'10"
	Hub 4'7"	Barracois 5'0"	
Blockhouse 8'0"	Strata 375'	Strata 3'0"	
	Harbour 5'8"	Victoria 6'6"	
Strata 570'	Strata 250'	Strata 235'	
	Boutilier 3'9"	Ferryhouse 3'0"	
	Strata 90'	Strata 75'	
	Back Pit 3'0"	Nothn. Head 4'0"	
	Strata 112'	Strata 75'0"	
Gowrie 5'0"	Phalen 7'0"	Lingen 5'6"	Indian Cove 3'6"
Strata 210'	Strata 130'	Strata 900'	Strata 215'
Spencer 3'6"	Emery 3'6"		Collins 3'0"
Strata 340'	Strata 425'		
Ig. Beach 3'0"	Gardiner 4'3"		
Strata 650'	Strata 475'		
Coal Brook 3'6"	Mullins 4'6"	Mullins 5'0"	
Strata 600'	Strata 1600'		
Tracey 5'0"	Tracey 5'0"		

MR. GORDON: On the south side of Sydney Harbour, the great part of the coal field is held by the Dominion Coal Company, Limited, under leasehold from the Province of Nova Scotia, while on the north side of the Harbour most of the field is held under lease by the Nova Scotia Steel and Coal Company Limited a subsidiary of the Dominion Steel and Coal Corporation, Limited and operated by Old Sydney Collieries, Limited. Almost all of the coal seams of highest quality lying under land areas have been worked out and production from these seams is now obtained only from their submarine extensions.



The Dominion Coal Company, Limited operates Collieries Nos. 4, 12, 16, 18, 20 and 26, and Old Sydney Collieries operates Princes and Florence Collieries. The Pictou coal field is a comparatively small one, centering about the Town of Stellarton. It is approximately 10 miles long and about three miles wide. It contains three series of coal seams.

The oldest series -- the so-called Westville series -- consists of four seams which dip in a northeasterly direction. The Upper, or Westville main seam, is a high quality seam which has been worked along its entire outcrop and to a very considerable depth. The second, or Scott Pit seam, is of rather poor quality but has been extensively worked. The third and fourth seams are of very inferior quality and have not been worked to any extent.

The Stellarton Series, which lies largely within the Town area of Stellarton, contains seven coal seams which pitch in a direction slightly east of north. The seams are thick and the upper five contained coal of good quality in the central part of the area. The coal quality deteriorates sharply on their eastern and western extensions and on the northern side of the main synclinal basin in which they lie. These seams have been extensively worked over a period of nearly 150 years. Operations in this series of seams have now stopped because of the exhaustion of coal reserves of good quality or due to the serious hazards which would exist if operations were continued. The strata in this series are much interrupted by numerous faults and by local foldings.

The youngest, or Thorburn series of seams,



1
2 is centered about the Village of Thorburn. This
3 series contains five seams, four of which have been
4 extensively worked and are of quite good quality.
5 The fifth seam is of inferior quality. These seams pitch
6 toward the northwest and the highest quality coal lies in
7 the southwestern flank of the basin they occupy.
8 Generally speaking, the seams deteriorate both in
9 thickness and quality on the northeastern side of the
10 basin to such an extent that they are unworkable.

11 The field to the north and to the south is cut
12 off by heavy faults. The strata in which the Pictou
13 seams lie consist very largely of thin bedded shales
14 which are very weak and which require much support
15 when exposed. (*)

16 COAL QUALITIES AND CHARACTERISTICS:

17 The seams which have been and are being
18 worked in the Sydney field contain high grade bituminous
19 coal of high volatile, low to medium ash and medium
20 to high sulphur contents. The volatile matter
21 in these coals varies from 34 to 38%, the fixed
22 carbon from 54 to 57%, the sulphur from 0.7 to 5%
23 and the ash from 4 to 12%. The calorific value of the
24 coal varies from 13,300 B.T.U.'s to 14,400 B.T.U.'s.
25 The fusion temperature of the ash is low, averaging
26 only 2,050 degrees F. (*) The best quality coal is found
27 in these seams on the northern flank of the Bridgeport
28 anticline and in the Sydney syncline. To the north-
29 west and to the southeast the ash and sulphur contents
30 increase. The coals are highly suitable for
domestic and industrial use. They are rather friable,

(*) Appendix No. 2

(*) Appendix No. 3



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2 however, and degrade in size through handling. The
3 coals readily adapt themselves to the coking process
4 but because of the high volatile and sulphur contents they
5 are not as suitable for the manufacture of high
6 grade metallurgical coke as some coals are. The
7 high volatile contents renders coke made from these
8 coals structurally weak and incapable of carrying
9 heavy burden in the blast furnace.

10 In some types of industrial boilers the low
11 fusion temperature of the ash is a distinct disadvantage,
12 especially when such boilers are operated at high ratings.
13 With proper preparation, the ash contents of all
14 the coals can be materially reduced but, unfortunately,
15 the sulphur content cannot. Irrespective of the
16 total sulphur content it cannot be reduced more than
17 one half of 1% by washing.

18 The high quality coals of the Pictou field
19 are highly volatile, medium to high ash and low sulphur
20 content coals. The volatile content varies from 28 to 31%
21 fixed carbon from 52 to 59%, ash from 8 to 14%, and the
22 sulphur content is generally less than 1%. The
23 calorific value of the coal varies between 12,900 and
24 13,500 B.T.U.'s and the fusion temperature of the ash
25 exceeds 2,400 degrees F. The coals are structurally
26 stronger than those of the Sydney coal field and stand
27 handling with less size degradation. The ash
28 content is finely disseminated throughout the coal
29 and cannot be greatly reduced by washing, except at
30 very low gravities. The coal is strongly coking
and is well suited for industrial and domestic uses.



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2 It makes a somewhat better coke for metallurgical
3 purposes than do the Sydney coals, but cost delivered
4 to Sydney makes its use prohibitive.

5 COAL RESERVES:

6 In the Sydney coal field the major reserve
7 tonnages of coal lie in the submarine extension of the
8 seams. Geological data indicates that the seams
9 are continuous on the frontage as we know them for
10 at least five miles from the coastline. It has been
11 possible to check in some small degree some of these
12 submarine reserves by borehole from advance working
13 in other seams. For the purpose of calculating
14 reserves the limit of working has been assumed to be
15 either five miles from the coastline or a strata cover
16 of 4,000 feet. Tonnages remaining in land areas have
17 been checked by drilling. Reserves have been divided
18 into two categories -- probable and possible.

19 High quality coals within the areas
20 defined are classed as probable reserves and these
21 amount to 388,695,000 tons. Coals of lower quality
22 and those about which less is known have been classed
23 as possible reserves. These possible reserves amount to
24 558,429,000 tons. The total reserves in the Company's
25 holdings in the Sydney field are, therefore, estimated
26 to be 947,124,000 tons. Further subdivision of
27 reserves has been made to indicate the high grade
28 coals which can be economically recovered based on
29 conditions as we know them. By economic coal
30 reserves we mean those probable reserves that can
be mined at a cost approximately equal to our present
operating costs and based on present labour and material



costs. These are estimated at 319,540,000 tons. (*)

In the Pictou field probable reserves have been determined by drilling and by underground workings. These are estimated to be 3,579,000 tons and lie in the McBean seam. Estimates show possible reserves of 9,100,000 tons located in the Westville main seam underlying Stellarton and in the MacKay seam near Thorburn. It is estimated that the economic reserves of the probable coal reserves as defined above amount to 2,830,000 tons.

STRATA CONDITIONS AND THEIR BEARING ON OPERATIONS:

As already mentioned the great proportion of the strata overlying and underlying the coal seams are weak thin bedded shales and fireclays. When such strata are exposed by excavation, even at shallow cover, support is required to hold up the roof. As greater covers are reached roof supports must be stronger and more closely spaced. At these greater depths there is a tendency for the pavements of the excavation to yield and to be thrust up into the roadways. This condition has forced the operator into a longwall method of mining because generally it was not economically possible to maintain roadways during a pillar drawing operation once a cover of 800 feet had been reached. Examination of the mine plans will show where many pillar sections have had to be abandoned because operations could not be carried on in the submarine areas at a lesser cover than would have been possible with safety had the bulk of the material overhead been predominantly sandstone,

(*) Appendix No. 4



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2 but it also adds materially to the cost of construction
3 and cost of maintenance of roadways which must be kept
4 up for haulage and ventilation purposes.

5 In the Pictou field the weak nature of the
6 strata in the vicinity of the coal seams necessitates the
7 use of much roof support, and in most cases the seam
8 pavements yield and heave into the passageways
9 requiring constant maintenance following construction.

10 The McBean seam, however, has a stronger
11 than usual pavement for that field and in most roadways
12 in the seam little difficulty is experienced from
13 heaving. The weak nature of the roof, however,
14 forced the operator to abandon a proposed room
15 and pillar method and to operate the seam with an
advancing longwall system.

16 METHODS OF WORK:

17
18 As early as 1720 coal was known to exist
19 in the Sydney field because outcrops were exposed in the
20 cliffs along the coastline. Operations were started
21 in these cliff outcrops and from them coal was supplied
22 to settlements along the neighbouring coast. It was
23 about 1827 before operations were started on any great
24 scale. A number of shallow shafts were sunk about that
25 time and organized mining started. The history or the
26 operations carried on between 1827 and 1945 has
27 been detailed in previous reports.

28 By 1945 methods of work most suitable for
29 the conditions existing had been developed and use was
30 made of mechanical aids wherever that was possible.
With the exception of the actual loading of coal



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2 the operations had been highly mechanized. The
3 frontage of the coal field had been allocated to
4 the various operating collieries giving, generally,
5 a frontage of three miles to each operation which
6 was considered to be the most economic frontage under
7 the conditions which existed. Where total extraction
8 was possible the method of work used was longwall
9 advancing and where total extraction was not possible,
10 because of lack of sufficient cover, rooms were
11 driven with ample pillar percentage left standing to
12 support the overlying strata. Where possible, electrically
13 powered equipment was used except in the immediate
14 vicinity of the coal faces where machinery was
operated by compressed air.

15 By 1945 it was evident that further mech-
16 anization must be undertaken in order to increase
17 productivity and improve production costs and at
18 the same time to improve the quality of the product.
19 A complete study of the long-range operation of the
20 field was undertaken by Company engineers and
21 consultants and examination was made of all existing
22 types of equipment for coal getting and underground
23 transportation. This study was completed in 1948
24 and a programme of continued mechanization was under-
taken.

25 From this study, plans were made for the mechan-
26 ical getting of coal in all the operations where physical
27 conditions permitted the use of such equipment. This
28 called for better and more flexible transport facilities,
29 for larger capacity mine cars, for preparation plants
30 and for the driving of two stone drifts, one at
Princess Colliery to permit the colliery's output to



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2
3 to be increased and the other near No. 20 Colliery.
4 The No. 20 Colliery tunnel was to be the main
5 haulage artery for the coal in all seams fronting the
6 area allocated to Nos. 4 and 20 Collieries. The
7 cost of the scheme was estimated to be sixteen and
8 a half million dollars for the Dominion Coal Company.

9 Forecasts had indicated that there would
10 be a continuing market for at least seven and a half
11 million tons of output from the Corporation's collieries
12 and it was planned to increase outputs to take
13 advantage of such markets. Five Joy loading units
14 with the necessary cutting and boring machines and
15 conveying equipment were purchased for No. 20
16 Colliery to work those areas under comparatively
17 shallow cover where total extraction could not be
18 carried out. A diesel locomotive, especially
19 designed for use in these collieries, was obtained
20 and three-ton mine cars made of aluminum were designed
21 and put on test in No. 18 Colliery. About the same
22 time a Joy loading unit with auxiliary equipment was
23 obtained for Princess Colliery and two such units
24 were also obtained for the McBean Colliery to speed
25 up development. The cost of the equipment installed
26 was -- at Dominion Coal company -- \$1,156,006.42; at Old
27 Sydney Collieries -- \$120,987.56; at Acadia Coal --
28 \$133,380.11.

29 In 1943, there being no suitable longwall
30 cutting-loader machine available, the engineers of the
Company started to design such a machine, which would



1 be suitable for the conditions under which it had
2 to work. When the design was completed a machine
3 was built and put into operation. With the knowledge
4 gained from the operation of the machine, its
5 design was modified to the present form of the
6 Dosco Continuous Miner.

7 At the same time the Maritime Coal Pro-
8 duction Assistance Act came into force. The
9 mechanization scheme was somewhat modified and called
10 for an expenditure of thirteen million dollars. A
11 loan of seven and a half million dollars, bearing a
12 3-1/2% interest charge, was made available by the
13 Federal Government to assist in financing the
14 mechanization program. The remainder of the amount
15 needed was to be provided from the Company's own
16 resources. The Government loan was to be secured
17 by chattel mortgage on equipment purchased.

18 Dosco mining machines totalling thirty-
19 nine have been purchased for use in the Sydney coal field
20 and conveyors suitable for handling the surge loading from
21 the machine have been developed and provided. Three
22 -ton capacity aluminum mine cars to a total of
23 1,555 units have been purchased. Additional Joy
24 loading units and one Joy continuous miner for face
25 development have all been purchased and put into
26 service. Stone loading machines have been acquired.
27 A wash-plant to handle the product of the Sydney mines
28 collieries has been designed and built and a tunnel,
29 3,500 feet long, has been driven from this washplant to
30 Princess Colliery pit bottom to permit the easy handling
of the coal from the colliery directly into the



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2 washplant and at the same time permit an increased
3 output to be obtained from that colliery. The
4 tunnel in the Glace Bay area was driven for a distance
5 of 1,600 feet and then it became apparent that the
6 anticipated market of seven and a half million tons
7 annually was not going to materialize in the
8 foreseeable future. The tunnel was, therefore,
9 stopped, to be proceeded with when output requirements
10 warranted the expenditure necessary to complete the
11 work.

12 Expenditures made by the Dominion Coal Company
13 for mechanization, excluding the expenditures made prior
14 to the mechanization program being put into effect,
15 totalled \$10,481,624.61 to July 31st, 1959. Of this,
16 \$6,986,749.74 had been obtained from the Government
17 loan, \$1,278,279.00 of which has been repaid. The
18 repayment of the remainder has been postponed with
19 installment payments to again commence in 1963, and
20 because of this the interest rate has been increased
21 to 4%. Interest paid to the Federal Treasury for
22 this loan has amounted to \$1,161,742.00 to July
23 31st, 1959.

24 At Princess Colliery mechanization has cost
25 \$5,062,826.31 to July 31st, 1959, all of which has
26 been paid for by Dominion Steel and Coal Corporation,
27 Limited.

28 In order to avoid mass layoffs and to train
29 the employees in handling of the new equipment, mech-
30 anization was not proceeded with at too rapid a rate.
As a result, it has been successful in most cases.



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2 The Joy loading units have not produced the tonnage
3 per shift that similar equipment has done in many
4 United States collieries, partially because of the
5 shorter working time due to the long travel time
6 required (*) by the men to get from the surface to the
7 working face in the Sydney coal field and, partially
8 because of the more severe physical conditions.
9 The Dosco Miner has, however, proven to be the most
10 productive longwall cutter-loader known. Incidentally,
11 twenty-one of these machines have been sold to other
12 countries for use in their mines. The conveyors
13 installed have worked very successfully, including the
14 cable belt conveyor in the Princess tunnel. This
15 belt unit is the only one of its type installed on
16 this continent. The implementation of the mech-
17 anization scheme has improved productivity (*) and has
18 permitted cost to be held at a lower level than
19 would have been possible otherwise. Several of the
20 operating collieries would have been closed before
21 this time had they not been mechanized. For average
22 output per man day in U.S. bituminous underground mines,
23 see appendix (**)

24 To simplify roof support in places where
25 mechanical loading was being carried on a system of
26 roof bolting was started and at this time over 130
27 miles of roadway have been supported in this manner.
28 It was decided to use yielding steel props on the
29 longwall faces instead of the hardwood cribs and dry
30 stone walls which had been used for support for many
years. It was thought, however, that it would be

- (*) Appendix No. 5
- (*) Appendix No. 6
- (*) Appendix No. 7



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2 better not to change the system of roof support on the
3 longwall faces until the men were thoroughly familiar
4 with the changed method of coal getting and conveying
5 on the faces and, therefore, steel props were not
6 introduced until two years ago. At the present time
7 seven faces are so equipped and the other faces will be
8 supplied with this type of support as finances permit.
9 The steel props are giving excellent results.

10 The construction and maintenance of
11 roadways with an advancing longwall system is a heavy
12 charge against the operations. Because no machinery
13 was available which could rapidly develop roadways
14 for a retreating operation and so avoid the construction
15 and maintenance costs, the Comapny had been forced
16 into advancing longwall methods. Within recent years
17 machines capable of rapid drivage have been perfected.
18 One such machine has been purchased and a unit of
19 two experimental longwall faces have been developed
20 for a retreating system. These faces are now in
21 operation and from the results so far obtained it is
22 indicated that the system will be successful.
23 However, further work must be done before its complete
24 success is assured.

25 The greatest difficulty with the system from an
26 operating point of view is the danger of gases accum-
27 ulating at the upper end of the top face of the
28 series and adequate provision must be made to be
29 certain that ventilation currents will carry away
30 gases which might tend to gather. If this system



1
2 can be successfully worked it will mean a saving
3 in operating costs.

4 Because of the coal height or sharply
5 varying gradients it has not been possible to
6 mechanize face operations in all collieries.
7 Work has been carried on in designing a modified
8 Dosco Miner for work in low seams, but the design
9 is not yet complete in all its details. The work on
10 this design is being continued.

11 COAL PREPARATION:

12 In 1945 the output from the collieries
13 in the Province was prepared for market by removing
14 any undesirable material from the Plus 1-1/4" sizes
15 by hand. The Minus 1-1/4" sizes were not prepared
16 at all. Such preparation appeared to be sufficient
17 when the coal was loaded by hand and the men took
18 reasonable care to load only clean coal. This
19 condition has completely changed with the introduction
20 of mechanization in the coal loading operation.

21 When the McBean Colliery was opened in 1947
22 it was proposed to load the coal mechanically. A
23 preparation plant with a capacity of 240 tons per
24 hour was erected at Stellarton in 1947 to wash the
25 output of the Acadia mines. This plant washes that
26 portion of the output which is above 3/16" in size, the
27 Minus 3/16" coal is not washed. The plant turns out
28 an excellent product in the sizes required for the
29 market. The sized coal is dewatered after washing
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3 by dewatering screens and is oiled to make it dust-free
4 if the customer so desires. At the present time the
5 plant is treating only 900 tons per day, which is
6 the output of the McBean mine.

7 The mechanization program of the Dominion
8 Coal Company called for the construction of a
9 preparation plant which could handle and input of
10 22,000 tons in 16 hours. It was decided, however, that
11 before such a plant should be built, a plant to prepare
12 the output from the Sydney mines collieries should be
13 constructed as a pilot plant to determine the most
14 suitable types of equipment which should be incorporated
15 in the much larger Dominion Coal Company plant. A
16 preparation plant was erected in Sydney Mines in 1953.
17 This plant has a capacity of 375 tons per hour and
18 washes the Plus 1/4" fraction of the output of the
19 Sydney Mines Collieries. As at Acadia, the Minus
20 1/4" product is not prepared. This plant does an
21 excellent job in preparing the sizes it washes and its
22 operation has provided the data required to determine
23 the equipment which should be used in the proposed
24 Dominion plant.

25 Prices of equipment and of construction work rose
26 sharply after the mechanization program was decided
27 on and estimates of cost of implementing the
28 program made up. As a result of this, finances
29 have not been available to erect the proposed Dominion
30 plant, as such a plant would cost, at this time, about
five and three-quarter million dollars. The plans
submitted to the Coal Board were turned down as the



1
2 Board felt the size of the plant was too large. Plans
3 for a somewhat smaller plant are presently being made.
4 It is essential that much of the Dominion output
5 should be prepared by washing in order to provide
6 the market with the coal it demands. In the meantime,
7 and for some years past, as large a tonnage of
8 Dominion coal as the plant at Sydeny Mines could
9 handle has been washed at Sydney, in order to meet
10 as much of market requirements as possible.

11 The availability of a double screened
12 coal of excellent quality has increased demands for such
13 coal, particularly in the domestic market. This
14 size of coal is taken largely from the Minus 1-1/4"
15 fraction and its removal results in the making of large
16 tonnages of Minus 1/4" coal for which there is
17 not always a market available. As a result nearly
18 400,000 tons of this fine coal are stockpiled at
19 various places. In stockpiling, even when firmly
20 packed, coal of that size has a tendency to absorb
21 moisture and unless it is dried before shipment it is
22 difficult to handle in plants equipped with pulverized
23 fuel boilers, which might use it. The disposal of the
24 Minus 1/4" product has become of extreme importance
25 as the output of the collieries to a very considerable
26 extent depends on its successful disposal.

27 With the soft pavements in the Sydney coal field
28 it is not a simple matter to keep coal clean when it is
29 loaded mechanically and it is highly desirable that
30 the Minus 1/4" product should be improved by washing
followed by the drying of the cleaned product, in order



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2 to make it most acceptable to the available markets.

3 This phase of coal preparation is presently under
4 study by the Company engineers, however, unfortunately,
5 the necessary funds for the capital expenditures
6 required to build the plants are not available from
7 the Company's own resources. The construction of
8 these plants is, however, necessary if even present
9 day outputs are to be maintained.

10 Consideration has been given to briquetting
11 some of the fines but the tonnage which could be
12 absorbed by such means is comparatively small.
13 Every effort is being made to reduce the percentage
14 of fines made in production.

15 To improve the size consist of the output
16 from the Dosco Miner a wedge attachment has been
17 designed for use with it. This attachment has increased
18 the percentage of Plus 1-1/4" coal by 10% and reduced the
19 Minus 1/4 fines in the output by 15%. The wedge
20 attachment is being fitted to the machines as rapidly
21 as possible, where conditions are suitable for its use.
22 At this time nine of the machines in service have been
23 so equipped and by the end of April, all machines should
24 be equipped with wedges where there is a height of seam
25 sufficient to permit its use.

26 MARKET TRENDS:

27 In 1945, with hand-loading, the output from the
28 collieries was about 50% Plus 1-1/4" coal, with the
29 remainder being 1-1/4" Slack. This division of the
30 output met market requirements. A shrinking demand



1
2 for large size coal took place gradually, with a
3 sharp decrease as the dieselization of the eastern
4 Railways took place. This dieselization has resulted
5 in the loss of markets of 1-1/2 million tons of large
6 size coal. At the same time markets for Slack coal
7 increased so that as mechanization proceeded and additional
8 Slack was made by the machines used, the output of
9 the collieries was kept quite well in balance with market
10 demands. At times, however, large size coal had
11 to be crushed to meet demands for Slack coal. With
12 recent losses of large Slack coal markets it has
13 been necessary to seek markets elsewhere. Unfortunately,
14 many of the markets available require double screened
15 coal of Pea or Nut size. To supply these markets
16 large tonnages of Minus 1/4" coal have had to be made
17 and it has not been possible to dispose of all of this
18 fraction of the output, so that at the present time
19 there is a large tonnage of it in stockpile.

20 IMPORTANCE OF THE INDUSTRY TO PROVINCE'S ECONOMY:

21 At the present time coal is being mined
22 in four counties of the province. Most of the
23 communities in these areas are dependent entirely on
24 coal mining, while many neighbouring centres are
25 dependent upon it to a very large extent. The men
26 directly engaged in the industry number 9,856 and it
27 is estimated that well over 100,000 Nova Scotians
28 are dependent on coal mining for their livelihood and
29 as a matter of fact, there are few citizens in the Province
30 who are not dependent upon it to some extent.



1
2 The coal mining operations of the Corporation
3 within the Province of Nova Scotia employ 9,105 people
4 at this time. In 1959 these operations disbursed
5 \$59,597,599.00. Of that total \$29,162,669 was
6 spent for wages and salaries, \$1,307,440 for pensions,
7 \$246,126 for Unemployment Insurance, \$1,618,856 for
8 Compensation. \$7,638,320 for materials, \$1,676,016
9 for power and \$913,150 for taxes to the various
10 Governments. These expenditures were below normal due
11 to the fact that there was an average of forty idle
12 days in the colliery operations during that year.

13 In the larger mining centres churches,
14 schools and other public buildings have been erected
15 and the usual public services established. These
16 towns and communities are one-industry town and
17 the cessation of mining operations will mean complete
18 loss of all that has been established for public service
19 over many years.

20 COLLIERY CLOSURES:

21 It was the policy of the Companies to keep
22 developed mines in operation as long as possible. In
23 the past, provided the operations as a whole were
24 profitable, unprofitable mines were kept producing
25 although they should have been closed from a strictly
26 business point of view. This policy was established
27 and carried on for the benefit of the employees,
28 the Companies realizing that work was not available
29 nearby for any considerable number of men displaced
30 by colliery closures. Difficulties confronting the



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2
3 Industry for the past several years created financial
4 problems and in 1955 the Company announced that it could
5 no longer continue this policy.

6 The greatest difficulty confronting the
7 Companies from an operating viewpoint at the present
8 time is largely one of high operating costs. These
9 costs can be materially reduced if every mine which
10 continues in operation is worked on a full time basis
11 and at peak capacity. The nine collieries now operating
12 can be quickly developed to produce an annual output
13 of 6,475,000 tons on a full time basis (*). The
14 present capacity of the collieries should permit an
15 output of 5,500,000 tons. An estimate of sales for
16 1960 indicates that 4,300,000 tons of coal will be sold.
17 This means that idle time of approximately 60 days will
18 be experienced by most of the collieries this year.
19 The cost of maintaining the mines over such an extended
20 period of idleness will be very high and will result
21 in severe financial losses. Actually, if the Industry
22 is to be saved from bankruptcy, some action must be
23 taken to bring production more closely in line with
24 disposals. After the fullest consideration, the
25 decision has been forced on the operators to close
26 those collieries which are high in cost and in
27 which little can be done to bring about improvement.
28 This is the only solution to the problem which will
29 bring about stability for the Industry as a whole.

30 The first colliery to be closed will be
Florence Colliery, located in the Village of Florence.
This is a high cost colliery in which no substantial



1
2 cost reduction can be anticipated, and because of the
3 physical conditions within it, little can be done to
4 mechanize the coal loading operations. The undulations in
5 pitch encountered in the workings coupled with the stone
6 intrusions which appear without warning in the
7 seam make it impossible to use any known cutting-loading
8 machinery which otherwise might be used to reduce
9 production costs. This mine has a payroll force
10 of 587 men and 54 men now employed in auxiliary dep-
11 artments would be displaced by its closure.

12 The second mine to be closed will be No.
13 16 Colliery at New Waterford. This also is a high
14 cost mine. The coal loading operation in the
15 colliery has not been mechanized because the seam
16 is too low to permit the Dosco Miner to be utilized
17 in its workings. In many places in the working
18 faces falling stone of varying thickness follows
19 quickly the removal of the coal and it is difficult
20 to keep this stone from mixing with it. Indeed,
21 there is so much intermingling of stone and coal that
22 a Nut produce 1-1/4" x 3" in size is taken from the
23 output and must be washed before it can be marketed.
24 In addition to the falling stone, stone bands appear
25 in the seam in many places which makes the mechanical
26 mining of the coal very difficult and even if this
27 could be successfully done it would necessitate the
28 washing of the entire output. There are on the payroll
29 of the colliery some 1,116 men.

30 When it becomes necessary to close a third
colliery that mine will be Dominion No. 4, located in
Glace Bay. It will be closed because the coal it



1
2 produces is higher in ash and sulphur than the coal
3 from any of the other mines and it is, therefore,
4 the most difficult to dispose of in many markets.
5 No. 4 Colliery has on its payroll some 797 employees.
6 The closure of the two Dominion Coal Company collieries
7 would cause the curtailment of auxiliary department
8 forces by 60 men. Beyond this it may be necessary
9 to increase by mechanical means the productivity
10 of some mines and close others in order to control
11 mounting mining costs.

12 The coal presently tributary to Nos. 4 and
13 16 Collieries could be recovered at a later date
14 through cross measure drifts driven from Nos. 20 and
15 12 Collieries respectively, if it should be desired
16 to recover it at a future date. The coal remaining,
17 which is tributary to Florence Colliery, some 1-1/2
18 million tons, will probably be lost, although some of it
19 might be recovered from the Princess Colliery operation.

20 Some of the men displaced by closure will get
21 employment in the remaining collieries. This number
22 will not quickly exceed 200. Some will get employment
23 through the pensioning of employees in other collieries,
24 who are eligible for pensions or will be pensioned
25 themselves. These will number approximately 240.
26 Some of the men with more than five years service with
27 the Company will get employment by displacing men in that
28 same district whose length of service with the Company
29 does not extend beyond Jan. 1, 1955. This will not
30 increase employment but it will take care of approximately
980 men with comparatively lengthy service.



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2
3 Men hired subsequent to January 1st, 1955,
4 are classed as temporary employees who may be
5 displaced by employees having service extending to an
6 earlier date, should those older employees lose
7 their employment through mine closure or force reduction
8 brought about by mechanization. This arrangement
9 is effective within each of the several mining districts
10 but is not effective outside that district; that
11 is, a man employed in a New Waterford colliery may,
12 if he loses his employment under the conditions outlined,
13 displace a temporary employee in another New Waterford
14 colliery but not in a Glace Bay one. This arrangement
15 is an agreement made between the United Mine Workers
16 and the Company when mechanization was first started.

17 Unfortunately, the financial position of the
18 Company does not make it possible to pension employees
19 who, because of age or length of service, do not
20 qualify for a pension in accordance with pension
21 regulations. The Companies, will, however, co-operate
22 and do everything possible to obtain employment for
23 displaced employees in other localities.

24 The problem of being unable to dispose of
25 tonnages which can be produced is a most difficult one,
26 and the aforementioned solution is the only apparent
27 one that offers any hope of the Industry remaining in
28 existence at all.

29 It is now obvious that if the Industry is
30 to be maintained at the highest level, the pits
operating must work on a full-time basis and must
produce at maximum capacity. Only complete mechanization,
by the utilization of the best techniques and by



1
2 obtaining maximum production from operating collieries
3 can hold costs at reasonable levels.

4 The closure of Florence Colliery would
5 reduce the Industry's producing capacity by 1,400 tons
6 daily, the closure of No. 16 by 2,770 tons daily and
7 of No. 4 by 2,400 tons daily.

8 Should additional outputs over the capacity
9 of the remaining collieries be required at a future
10 date the Dominion Coal Company can open up a new
11 colliery in high grade coal near Lingan, where a
12 frontage of some three miles has been left for the
13 proposed colliery's operation. The colliery would
14 be developed when it is required and would eventually
15 have a capacity from the Harbour and Phalen seams
16 of 6,000 tons daily.

16 WAGES PAID BY THE INDUSTRY:

17
18 In 1945 the base labour rate was \$5.67 and
19 since many of the employees were Contract workers the
20 average daily wage of all employees of the collieries
21 amounted to \$6.94. Daily wages were increased
22 by \$1.40 in 1957, by 40¢ in 1948 and by 50¢ in 1949.
23 In 1950, in spite of a firm two-year Contract with
24 no increase in wages, the Companies paid to their
25 employees a bonus of \$100.00 each as the operations
26 had been profitable and because many industries across
27 the country had received substantial wage increases in
28 that year.

29 Again, in spite of the firm Contract, the
30 Companies increased wages by 60¢ per day in 1951.



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2 In 1952 there was a further increase in wages of \$1.00
3 per day. Wages were not increased again until 1957
4 when all rates were up-graded by \$1.00 per day and since
5 the large majority of the men were by that time datal paid
6 workers a production incentive of \$1.00 per day was
7 granted to men employed in the various sections of
8 the operations who produced pre-determined outputs
9 in any week. In 1958 a further increase of 30¢
10 per day was given. This brought the base wage rate
11 to \$11.54 plus \$1.00 if the production targets set
12 were obtained. The average daily wage in 1959 paid
13 by the Dominion Coal Company was \$13.75. It should
14 be noted that the Dominion Coal Company has not
15 been able to pay any dividends to its preferred
16 shareholders since 1952, and no dividends on the
common shares have been paid for over forty years.

17 It is unfortunate that most of the
18 colliery employees do not take advantage of all the
19 working time available to them. The loss of
20 available working shifts for all reasons in the
21 collieries during 1959 amounted to 12.73%. The
22 loss of working time which was avoidable amounted to
more than half that figure.

23 The Companies have done everything possible
24 to stop this loss of working time by means of
25 verbal and written warnings, and by the suspension
26 or discharge of those who habitually over a long
27 period deliberately lost time. In many cases
28 of discharge the Board of Adjustment ruled that the
29 man discharged should be reinstated in the Companies'
30



1
2 service after a period of suspension (*)

3 SUBVENTIONS:

4 The marketing of coal produced in Nova
5 Scotia is assisted by the Federal Government through
6 freight subventions to obtain markets in the Province
7 of Quebec west of Levis and in the province of Ontario.
8 This was a policy introduced by the Federal Government
9 in 1923 and was adopted as a means of assisting
10 the Industry rather than increasing the tariff.
11 Basically, the amount of assistance given is sufficient
12 to meet the laid-down cost of American coal at the
13 point of consumption in Quebec and Ontario up to
14 certain maximum amounts. At the present time
15 in Ontario the maximum subvention may amount to as
16 much as \$7.75 per ton. The policy of granting
17 subventions has been of great importance to the
18 Nova Scotia Coal Industry. Without subvention
19 assistance, markets for Nova Scotian coal would
20 be largely confined to the Atlantic Provinces.
21 Subventions will be dealt with in greater detail
22 later in the submission.

23 THE CHAIRMAN: You speak of the
24 American Markets being largely confined to the
25 Atlantic Provinces. To what extent does the
26 Dominion Coal Company or the Acadia or Sydney Mines
27 supply that market today?

28 MR. GORDON: Those mines, I should say,
29 sir, will supply approximately three quarters of it.

30 THE CHAIRMAN: Three quarters. That
covers what form of use?



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2
3 MR. GORDON: Domestic, Industrial,
4 and for the metallurgical coke-making use of the
5 Steel plant at Syndey.

6 THE CHAIRMAN: Approximately what
7 was the consumption of coal for metallurgical
8 purposes in 1959?

9 MR. GORDON: Approximately six hundred
10 and seventy-five thousand tons.

11 THE CHAIRMAN: And for Industrial
12 purposes?

13 MR. GORDON: Where do you mean?

14 THE CHAIRMAN: In the Maritime
15 Provinces.

16 MR. GORDON: I think the sales people
17 can handle that much more readily than I can.

18 THE CHAIRMAN: Do you not look upon
19 the Maritime Provinces as your primary markets of
20 disposal?

21 MR. GORDON: Yes we do.

22 THE CHAIRMAN: And can you suggest any
23 means by which the extension of that market could
24 be obtained by you as being the dominating productive
25 agency?

26 MR. GORDON: It could be helped by
27 the imposition the duty on imported heavy residual
28 oil, I believe. It could be further helped by
29 the imposition of a heavier duty on imported crude
30 oil provided the duty was applied to the price of
any resulting residual heavy fuel oil.



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THE CHAIRMAN: Yes. You mean residual oils obtained from foreign crude petroleum?

MR. GORDON: Right, sir. There would be some further help given if the province would provide for a sales tax on the use of lighter furnace oils for domestic heating purposes.

THE CHAIRMAN: Have you ever considered the question of a change in the nature of the subventions?

MR. GORDON: Yes, we have considered it at very great length. The difficulty with it is that -

THE CHAIRMAN: What was the change that you had considered?

MR. GORDON: We had thought of applying an assistance subsidy to coal sold, irrespective of whether it was sold in the Maritimes or elsewhere, so that we could take advantage of any market that was offered, and it would be up to the Company itself, provided that the subsidy was large enough per ton to use some of the money that might be obtained from sales close to the collieries, to permit sales at a further distance, into the Province of Quebec, for instance.

THE CHAIRMAN: Wouldn't that be the desirable thing to do?

MR. GORDON: Provided the subsidy was enough, it would be a desirable thing to do.

THE CHAIRMAN: If you had a flat rate, it would be to your advantage to ship to the closest



1
2 market, because your costs of transportation alone
3 would be an inducement.

4 MR. GORDON: That is true.

5 THE CHAIRMAN: And do you think
6 that figure of three quarters of the supply would
7 be an accurate one?

8 MR. GORDON: It is an approximate one,
9 sir.

10 THE CHAIRMAN: Do you think, in
11 respect to the distribution through the Maritime
12 Provinces, you are maintaining the same close
13 relationship to the dealers as you did formerly?

14 MR. GORDON: Yes.

15 THE CHAIRMAN: I know it is sometimes
16 very difficult to obtain coal that is required from
17 different centres in the Maritime Provinces.

18 MR. GORDON: Only at certain times of
19 the year when there is a very heavy demand for
20 preferred coals from all dealers. We have just
21 heard the Government of Newfoundland's submission,
22 and our trouble is that there are certain preferred
23 coals, particularly coals processed through the Sydney
24 Mine Wash Plan, which come into heavy demand about
25 the month of October, and everyone wants their coal
26 at that particular time. From October to the
27 end of January, or the middle of February, we find
28 great difficulty in providing all this preferred
29 coal that is suddenly wanted, there being very little
30 market for it during the remainder of the year.



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2 THE CHAIRMAN: You have not attempted
3 to make any arrangement by which that could be
4 distributed?

5 MR. GORDON: We have, yes. We have
6 arranged long term credits.

7 THE CHAIRMAN: Does that apply to --
8 I notice that it was extended to Newfoundland?

9 MR. GORDON: And to others in the
10 Maritimes Provinces. Not to every one. Their
11 credit had to be reasonably good. We, at times,
12 have given reduction in rates on coal bought by
13 dealers for winter distribution during the summer
14 months.

15 THE CHAIRMAN: Well now has that been
16 universally applied because in one case there was
17 a criticism because something of that sort had
18 not been applied.

19 MR. GORDON: In Nova Scotia I think
20 it was quite universal to those dealers, and the
21 amount was 50¢ a ton.

22 THE CHAIRMAN: Was it extended to
23 New Brunswick? I got the criticism in New Brunswick
24 that although other dealers --- I think was
25 also the question of coke coming from other sources --
26 adjustments of that source were offered to induce
27 a more uniform supply of coal throughout the year.

28 MR. GORDON: What we found in practice
29 sir was that there was a comparatively small additional
30 tonnage was sold during the summer months. It was
not a large tonnage and we suspect that the dealers



1
2 did not pass the deduction in price along to the
3 consumer and so induce the consumer to put the
4 coal in.

5 THE CHAIRMAN: Well wouldn't it be
6 some internal incentive to buy that at a lower price
7 and that would put them in a better position, even if
8 the whole thing has been passed on? Wouldn't it
9 be an additional strength to the coal industry as
10 a whole?

11 MR. GORDON: Well we couldn't --
12 if you are selling the coal to a dealer, you sell
13 it to him at a reduced price and if he won't pass
14 that price deduction along to the ultimate consumer,
15 then the ultimate consumer is not going to take his
16 coal in the summer time.

17 THE CHAIRMAN: In the other cases now
18 where it might be in rush period, he can't get that,
19 he is going to pay more but he is going to a different
20 source of coal; going to American Coal which has
21 actually happened.

22 MR. GORDON: Yes, there has been some
23 American Coal come in but in most cases where that
24 American Coal came in it was not more expensive
25 than the Nova Scotia products.

26 THE CHAIRMAN: No, but they made
27 concessions at different times of marketing that
28 coke. Do you sell much coke?

29 MR. GORDON: Not a great deal. The
30 Coal Company doesn't sell any. It is a Steel
Company product.



1
2 THE CHAIRMAN: Does the Steel Company?

3 MR. GORDON: Not a great deal sir.

4 THE CHAIRMAN: Why is that?

5 MR. GORDON: Because their Coke Plants
6 are pretty busy making coke for their own use, and
7 it is only the small sizes of coke that they do not
8 want that they are selling to the public.

9 THE CHAIRMAN: I know there is considerable
10 coke coming in from Montreal into New Brunswick.

11 MR. FAIRLEY: May I speak to this
12 question? I think you will find that in many
13 of these things with respect to sales, the submission
14 of the sales department can answer some of these
15 questions.

16 I can answer specifically about the coke
17 coming in from Montreal. That is coke made in
18 Montreal by the LaSalle Coke Company which is a
19 Company owned by the Natural Gas and they make
20 a domestic type coke which we cannot make with these
21 coals here. As a result, they make it and they
22 use American Coal entirely.

23 THE CHAIRMAN: Of course I suppose the
24 answer is that if you use ordinary coke then the
25 question would be whether or not it would be made
26 to go into coking directly or exclusively, and I
27 suppose your answer would be no.

28 MR. GORDON: I would say so.

29 MR. FAIRLEY: That is correct, because
30 this type of coal does not make too good a domestic
coke frankly and people are getting away from coke



1
2 as a domestic fuel. We do sell, from the Steel
3 Company, some of our small size of coke for industrial
4 use to smelter companies, and so forth, who may
5 use it.

6 THE CHAIRMAN: This happened to be
7 a dealer who had purchased coke from you and was
8 very much annoyed that he couldn't continue to
9 purchase from you but he was forced to go to
10 Montreal.

11 MR. GORDON: There may be a reason
12 for that. The point is when the Steel Company
13 is working very much to capacity, it needs the full
14 use of the coke ovens. If it is not, then it can
15 continue to produce coke and dispose of some of it
16 to the domestic market.

17 THE CHAIRMAN: There is no doubt that
18 the La Salle Company is in the business of furnishing
19 gas. It is the product from that in the coal
20 and the coke. There is a basic distinction
21 then between your position in relation to coke
22 and that of Montreal?

23 MR. GORDON: Yes.

24 THE CHAIRMAN: In that respect?

25 MR. GORDON: And that particular coke is
26 making a high grade black coke for foundry use.

27 THE CHAIRMAN: If you open the Langan
28 Mine what would it cost, and over what period of time
29 to be able to meet additional demand?

30 MR. GORDON: To come up to the full
output of 6000 tons, it would be 3000 from the Phalen



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and 3000 from the Harbour; would take about five years. The total cost would be something of the order of 4-1/2 million dollars.

It would mean, however, that we could get a part of that tonnage, 2000 tons a day in about two-years time at the outset, from the start of operation.

THE CHAIRMAN: How much of your probable economic reserves have you attributed to the Lingan area?

MR. GORDON: I can't give you that figure off hand, but it is quite a large tonnage.

THE CHAIRMAN: I thought it was about 94 million tons.

MR. GORDON: It is something of that order.

THE CHAIRMAN: Appendix No. 4.

MR. GORDON: It is something over 60 million.

THE CHAIRMAN: 60 million?

MR. GORDON: Something over that. It is in excess of 60 million.

THE CHAIRMAN: I think the actual figure is something over 92 or 93 million. I have seen that figure.

MR. GORDON: It may be. I have the figures broken down into seams here but not into specific areas. If you are interested in having that figure, I will look it up and obtain it for you.

THE CHAIRMAN: If you will give it to me.



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2 I was just wondering whether the estimates that
3 you have given really take into account all of the
4 possible conditions that may be met. Take No. 4
5 Mine which is in the Phalen Seam. No. 4 Mine, what
6 would you estimate that as having in the way of
7 recoverable coal today?

8 MR. GORDON: Once again sir, I will have
9 to get that information. That is an area, you
10 see, and I don't have that information with me.

11 THE CHAIRMAN: I see in the 1956 report
12 it was estimated to have 37 millions tons with an
13 estimated life of 94 years. Would you give
14 that life to that mine today?

15 MR. GORDON: Today, no.

16 THE CHAIRMAN: Why?

17 MR. GORDON: Because part of that coal
18 which was included in those estimates is lower in
19 grade. That is to say, it is higher in sulphur
20 and higher in ash than we thought it was at the time
21 that estimate was made up.

22 We worked far to the east in that mine
23 and we know that that coal -- we wouldn't consider
24 it a high grade coal today, and we have deliberately
25 cut the boundary from the far eastern limit that it
26 had to one closer to the main seam because of the
27 quality.

28 THE CHAIRMAN: What difference would that
29 make in the estimated recoverable coal? What I
30 am suggesting is this; that there is a good example
of where there is an extravagance of the estimate in



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the probable reserves.

MR. GORDON: But not of the probable economic reserves because that has been cut out in that figure.

THE CHAIRMAN: 94 years, estimated life of the colliery.

MR. GORDON: Well, wasn't exactly a life of No. 4 colliery, of necessity.

THE CHAIRMAN: But that is included in this. You see, you reach about 1 billion tons, approximately?

MR. GORDON: Yes, and the figure is roughly the same for all coal.

THE CHAIRMAN: But when I look over that and see that you have today very inferior coal, that does not warrant mining, so that that 94 years estimated colliery life is not realistic.

MR. GORDON: No, but it isn't 94 years for No. 4 colliery. As I understand the picture, it did not mean of necessity that the coal should come out through the present No. 4 opening.

THE CHAIRMAN: No, but you can take it today through any opening you please. What is the probable life you place on it today at that area, attributed to No. 4.

MR. GORDON: I will bring those figures here and give them to you. I have not got with me the tonnage broken down to areas, but just the seams.

THE CHAIRMAN: All I am suggesting is



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2 we may be over estimating.

3 MR. GORDON: I don't think so sir.

4 THE CHAIRMAN: The capacity of this
5 field.

6 MR. GORDON; No, I don't think so.

7 THE CHAIRMAN: You have carried it
8 out to what, five miles?

9 MR. GORDON: Five miles or 4 thousand
10 feet.

11 THE CHAIRMAN: Five miles from where?

12 MR. GORDON: The shore line.

13 THE CHAIRMAN: That might be how many
14 miles from the outcropping?

15 MR. GORDON: Six, six and a half.

16 THE CHAIRMAN: So you have 11 miles of
17 mining?

18 MR. GORDON: No, a total of six or six
19 and a half.

20 THE CHAIRMAN: Oh I see, that would
21 be a mile or a mile and a half?

22 MR. GORDON: From the coast line to the
23 outcrop.

24 THE CHAIRMAN: You have some mines in
25 which the outcrop is more than a mile and a half
26 from the shore?

27 MR. GORDON: No openings with an outcrop --.

28 THE CHAIRMAN: Then you don't begin
29 always from the outcrop?

30 MR. GORDON: Not necessarily.--

THE CHAIRMAN: I suppose in the first
years of your mining in the Lingan area you are going



1
2 to get what might be called the cream out of it.
3 How is the quality?

4 MR. GORDON: It is high quality.
5 The Lingan area is high quality both in the Phalen
6 and the Harbour.

7 THE CHAIRMAN: You would get the
8 cream.

9 MR. GORDON: That is questionable because
10 the Harbour Seam actually crops submarine; it crops
11 under the water and only comes ashore on the western
12 edge of the frontage. .

13 THE CHAIRMAN: Can you crop it through
14 another seam?

15 MR. GORDON: No, actually we come down
16 from the western end of the frontage.

17 THE CHAIRMAN: The western end which does
18 come up above the actual Harbour line?

19 MR. GORDON: That is right.

20 THE CHAIRMAN: How would the cost of getting that coal out, apart
21 from its quality, compare with the average of the
22 existing production?

23 MR. GORDON: Oh much lower.

24 THE CHAIRMAN: Much lower?

25 MR. GORDON: Yes sir.

26 THE CHAIRMAN: Can you give any indication
27 of the percentage?

28 MR. GORDON: When an operation carrying
29 3 thousand tons daily was achieved, the cost of
30 that output would be about two-thirds of the present



1
2 cost, the present average cost.

3 THE CHAIRMAN: Well that would put
4 it in a respectable class of cost?

5 MR. GORDON: Oh yes, but it is going
6 to cost 4-1/2 million complete, capital money.

7 THE CHAIRMAN: That is capital money.
8 You are satisfied then with the figures dealing with
9 the recoverable reserves which you have given to us?

10 MR. GORDON: Yes sir, as far as one
11 can calculate reserves without drill holes, without
12 a great many drill holes.

13 THE CHAIRMAN: You missed -- not you,
14 but the calculation erred in the No. 4 because it
15 did not take into account the possible petering out
16 of the quality.

17 MR. GORDON: That is true.

18 THE CHAIRMAN: Is there any possibility
19 of that in any of the other seams?

20 MR. GORDON: I don't think so. There
21 are spots where there might be a petering out in
22 quality, to some extent, and there are spots too
23 where geological difficulties might interfere, and
24 that really is where you get this difference between
25 the economic reserve and the probable reserve.

26 There is a difference that I have shown here;
27 the probable reserve in the Sydney field amounted to
28 388 million tons. Out of those, 319 million are
29 classed as economic. That is a difference of
30 roughly 70 million tons.

THE CHAIRMAN: By economic value,



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2 you mean the assumption of the continuance of the
3 present basis of cost?

4 MR. GORDON: Yes.

5 THE CHAIRMAN: And the continuance of
6 the subventions?

7 MR. GORDON: Yes, under present conditions.

8 THE CHAIRMAN: Take the Lingan now,
9 after a period of years until you would reach out say
10 two miles, now how would the cost then be affected?

11 MR. GORDON: Well one will have to take
12 some basis, and at present wages, present material
13 prices there would be some increase but not too great,
14 and the reason I say that is this; it would be
15 quite some time before a total extraction could be
16 had because of the shallowness of the cover.

17 THE CHAIRMAN: Total extraction from
18 what?

19 MR. GORDON: From the Lingan area, and
20 that would mean that a large, very large proportion
21 eventually reaching 65% of the seam would have to
22 be left in to support the sea bottom.

23 THE CHAIRMAN: Is that different from
24 the present workings?

25 MR. GORDON: It is not different from
26 what the present workings were when they were working
27 under shallow cover. It means that you are going
28 to eventually only take 35% of the coal and the other
29 65% has to be left as a pillar and that is not
30 going to be a very cheap operation.

THE CHAIRMAN: That is in Lingan?



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3 MR. GORDON: Yes.

4 THE CHAIRMAN: What percentage of the
5 Lingan block can be extracted by any, take an
6 economical operation?

7 MR. GORDON: As soon as you reach
8 a covering of 700 feet.

9 THE CHAIRMAN: Yes, but from there on.

10 MR. GORDON: From there on the method
11 of work will be a retreating long wall. From our
12 knowledge of the sea, we believe it could be a
13 pretty nice operation.

14 THE CHAIRMAN: What would be --- this
15 is for my own information -- you take it that you
16 have reached the 700 feet under the sea level, what
17 would be the difference between the cost of your
18 operation in the Lingan area and the cost of the
19 operation in No. 18?

20 MR. GORDON: It would be less.

21 THE CHAIRMAN: By what reason?

22 MR. GORDON: Because it would be
23 retreating from the Lingan, and the roadways would
24 be constructed, heavily constructed, specially driven,
25 and maintenance would be cut to a minimum.

26 THE CHAIRMAN: By construction of
27 roadways and drifts -- and if I misuse any of
28 these terms you correct me -- roadways and levels
29 will take advantage of the experience of these
30 years in the other mines.

MR. GORDON: That is right.

THE CHAIRMAN: So it is the improvement



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2 that will be made upon the physical mode of extraction?

3 MR. GORDON: Yes. What would be done
4 in practice sir is that money would be spent in the
5 construction of the roadways to avoid maintenance
6 charges later on.

7 THE CHAIRMAN: And you have not been
8 able to do that in relation to the others because of
9 the initial mode of reaching the coal?

10 MR. GORDON: In some cases that is true.
11 The original method of construction has allowed
12 things, or disturbances to take place. Falls
13 have been created, and so on, pavement has heaved,
14 and this means continuous maintenance on many of
15 our roadways.

16 What would be done in a new colliery
17 like the Lingan colliery would be that the construction
18 of the roadways and the facing of the roadways would
19 be done in such a way that maintenance costs would
20 be kept to an absolute minimum.

21 THE CHAIRMAN: And that is because under
22 the present conditions in the same area as you would
23 be in Lingan your freedom of action is hampered by
24 reason of the earlier working?

25 MR. GORDON: To some extent that is
26 so.

27 THE CHAIRMAN: Is there any other
28 factor ?

29 MR. GORDON: Well there is this factor;
30 that the very best equipment, the best and most
suitable type of equipment that is known today would



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2 be employed right at the beginning.

3 THE CHAIRMAN: That is true, that is
4 employed today in No. 18?

5 MR. GORDON: Yes, that is true but you are
6 working in an advancing method of long wall in No. 18
7 and you have heavy construction and heavy maintenance
8 costs in your long wall roadways.

9 THE CHAIRMAN: In the immediate area
10 of the extraction that is going on?

11 MR. GORDON: Yes sir.

12 THE CHAIRMAN: What is that due to?

13 MR. GORDON: That is due to the fact that
14 the strata overlying the seam are settling and the
15 roadways are being damaged by the moving stresses
16 applied to the members holding up the roadways.

17 THE CHAIRMAN: Why wouldn't that apply
18 in the Lingan Mine?

19 MR. GORDON: Because what we do would
20 be to drive roadways through the solid coal and
21 retreat from the boundary of the seam, or from a
22 chosen boundary, retreat to the main artery.

23 THE CHAIRMAN: That is, you reach a
24 limit of your penetration?

25 MR. GORDON: And then start working
26 back.

27 THE CHAIRMAN: Can't you do that today?

28 MR. GORDON: The difficulty with the use
29 of a retreating system has been that in the past
30 a machine wasn't available to drive quickly, and it
meant that to work back the retreating system over



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2 a length of a mile and a half, it would take years
3 to do the necessary development, and the cost of
4 maintaining a roadway, all those roadways for retreating
5 long wall over the period of time it would take to
6 do the driving, and then the period to retreat the
7 walls would be such that the cost would be just
8 as great one way as the other, and retreating couldn't
9 be attempted in this area until a machine was
10 available which could quickly drive the development
work.

11 THE CHAIRMAN: Well have you any
12 such machine?

13 MR. GORDON: Yes, we have.

14 THE CHAIRMAN: What I am puzzled with
15 is this: you are now at your maximum of 4 miles
16 under the sea. Take No. 18.

17 MR. GORDON: Well it isn't anything like
that.

18 THE CHAIRMAN: Let us say what, a mile
19 and a half?

20 MR. GORDON: About.

21 THE CHAIRMAN: A mile and a half.
22 Now supposing you are out to the seam face in the
23 Lingan Mine.

24 MR. GORDON: Well it is a different setup
25 all together.

26 THE CHAIRMAN: In what respect?

27 MR. GORDON: We cannot go to the dip
in No. 18 Colliery.

28 THE CHAIRMAN: What is that?
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MR.GORDON: Further, we cannot go further seaward.

THE CHAIRMAN: In No. 18?

MR. GORDON: That is right, because below our present workings in 18 colliery the area has been worked out by Princess. What we are doing is moving latterly towards another flank of the Princess workings.

THE CHAIRMAN: I just want to get it clear now. In the Lingan Mine you would carry on most of your, or all your operations in the retreat method?

MR. GORDON: That is right.

THE CHAIRMAN: Does that require the establishment from the beginning of an ultimate limit?

MR. GORDON: Well yes, but those limits are established. They are established by either 26 colliery to the east, or by 12 or 16 collieries to the west.

THE CHAIRMAN: I mean a limit directly ahead.

MR. GORDON: There is nothing ahead.

THE CHAIRMAN: Suppose you place on these estimates a limit of 5 miles. That five miles, will that reach the actual limit of any economic production?

MR. GORDON: Not necessarily. We had to choose a figure and five miles was chosen generally because of the length of travel time.

THE CHAIRMAN: Well then for the purpose of retreat, you do not have --



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MR. GORDON: You wouldn't go straight to the bottom and work back. You would retreat latterly only.

THE CHAIRMAN: Latterly?

MR. GORDON: Yes.

THE CHAIRMAN: Centering everything on the main tunnel?

MR. GORDON: That is right.

THE CHAIRMAN: I suppose you could do that today can't you?

MR. GORDON: Well, you see there are several difficulties with a retreat system.

THE CHAIRMAN: I may be wrong, but I understood that you were actually carrying out certain limit operations?

MR. GORDON: That is right.

THE CHAIRMAN: In the retreat.

MR. GORDON: And the reason for carrying out those experimental operations, we had to know whether a roadway could be maintained without very heavy construction for the limited length of time it had to stay open to allow the removal of the coal.

The other thing we had to know was whether we could successfully, bearing in mind that that is above our capital for electrical power equipment, we had to know whether or not we could be certain that gases would not accumulate at the top end of the top face, or a series of faces. We had to be sure that that gas would be swept away at all times.



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THE CHAIRMAN: I think you made it clear to me when I use the word "limit" you took it to apply to a lateral limit and not a forward limit?

MR. GORDON: Yes.

THE CHAIRMAN: So there your limits are stopped by the adjoining mine?

MR. GORDON: That is correct.

THE CHAIRMAN: And you cannot proceed to that limit and work defensively throughout?

MR. GORDON: That is right.

THE CHAIRMAN: Or retreat. Thank you Mr. Gordon. Unless there are some questions.



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MR. MANSON: (Provincial Minister of Mines)

There are a couple of items in Mr. Gordon's statement, page 5, with reference to metallurgical coke and the availability of making coke sufficiently strong to stand the heavy burdens of the blast furnace.

Then at Page 6 it refers to Pictou County Coal, cost prohibitive. I gathered from that, other than the costs, McBean coal is suitable?

MR. GORDON: I didn't say that.

What I said was it produces a better coal, but not so much better that the extra freighting costs could be covered by the improvements.

MR. MANSON: You do not feel there are any reserves of coal developed that would be completely suitable for metallurgical coal in this Province.

MR. GORDON: Economically, no. I know of none.

MR. MANSON: Page 10 there is reference made to study by consultants. Were they outside consultants?

MR. GORDON: Paul Weir, to be specific.

MR. MANSON: Page 21, you refer - pages 21, 22 and onwards, closing of collieries. I just want to clarify the position. The closing of collieries in the immediate future, this year?

Is that indicated in your brief, or is it a matter that is under consideration?

MR. GORDON: It is under consideration. The exact dates of closure have not been settled yet. There are various reasons for that, one of them being



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that our entire sales or disposals have not yet been decided.

Another reason is that this present Commission is sitting, enquiring into the whole situation, and perhaps the Commission will come forward with something that will help.

MR. MANSON: I just want to make the point clear, Mr. Commissioner, that this brief does not necessarily - or am I right in assuming it does not necessarily mean there has been a definite schedule laid down for the closing of collieries?

MR. GORDON: As to dates, no. Otherwise, yes.

MR. MANSON: This is the long-term study and your long-term position you are referring to, not the immediate future?

MR. GORDON: Well, I am not saying just how quickly that takes place.

MR. MANSON: But it is specifically aimed at the long-term?

MR. GORDON: That is correct.

MR. MANSON: That is all I have.

MR. GORDON: But the term may not be so very long.

THE CHAIRMAN: Assuming now the closure of these three collieries that you mentioned, what would be the remaining capacity to produce?

MR. GORDON: Remaining capacity to produce would be -

THE CHAIRMAN: Not actual production as indicated last year or the year before, but your



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2 capacity.

3 MR. GORDON: It could be brought up
4 to 4 million 8 hundred thousand.

5 THE CHAIRMAN: That includes tonnage
6 required for metallurgical purposes?

7 MR. GORDON: Yes, sir.

8 THE CHAIRMAN: Mr. Marsh, have you
9 any questions?

10 MR. W. MARSH: Yes, sir. I would
11 like to refer to Page 22: "actually, if the industry
12 is to be saved from bankruptcy, some action must be
13 taken to bring production more closely in line with
14 disposals." Can we assume if markets were available
15 your company would continue to operate its present
16 mine and maintain your present productive capacity?

17 MR. GORDON: If prices could be
18 obtained from the coal which would permit us to do
19 it, yes.

20 MR. MARSH: In other words, you mentioned
21 to Justice Rand when you were being questioned by
22 Mr. Manson about the long range thinking on mine
23 closures - could we assume then that after mentioning
24 to Mr. Rand you hoped he could provide a solution to
25 prevent this, could we assume there is no mine
26 closure contemplated until after Mr. Rand brings down
27 his report?

28 MR. FAIRLEY: Our position is this, Mr.
29 Commissioner, that we feel, as we have said before,
30 that productive capacity must be brought into line
with our ability to dispose of the coal. We have



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2 enumerated the listing of the order in which we
3 think collieries should be closed for the various
4 reasons mentioned.

5 We have set no specific date for closures.

6 There has been great interest of course
7 on the part of everyone, the Company, the Union,
8 the Government and everybody, in trying to find
9 some means of keeping these collieries open until
10 this Commission brings in its findings. We are
11 in hopes some means will be found to keep these
12 collieries open. We don't know at this minute
13 whether a means will be found or whether it will not.

14 If such means are found, the collieries
15 will be kept open certainly through this calendar
16 year. If such means are found. However, if
17 such means are not found, then the Company would,
18 of course, have to take what action it deems necessary
19 in order to maintain itself.

20 Does that answer your question, sir?

21 MR. MARSH: Are you referring to the
22 Federal Government?

23 MR. FAIRLEY: I am referring to work
24 that everybody is doing, the Federal Government,
25 Provincial Government, the Company and the Union.

26 MR. MARSH: Specifically, since that
27 is where the finances must come from, we must refer
28 to the Federal Government.

29 MR. FAIRLEY: We are obviously working,
30 as I say, on this job. I would prefer to make
no specific reference to anybody, but we are certainly



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2 working with all of them, and we hope some means
3 may be found.

4 If such means are found, fine. If they
5 are not found, then the Company must, of necessity,
6 take what action it deems necessary.

7 MR. MARSH: In other words, Mr. Gordon
8 should not have made that reference to Mr. Rand,
9 that he hoped he could find a solution thereby
10 indicating the mines would be kept open and giving
11 him a chance to come up with --

12 MR. FAIRLEY: Mr. Gordon made exactly
13 the same statement I made, I think, that we hoped
14 a solution would be found, which I think was almost
15 the exact quotation that I made.

16 THE CHAIRMAN: I think it is clear
17 what the statement means. We cannot fairly
18 ask him anything more definite than that. I take
19 it that you desire these coal mines to continue operations?

20 MR. FAIRLEY: Yes, sir. If we can
21 find suitable market at prices which would allow us
22 to operate in a normal business manner, we certainly
23 would like to see them remain open. We are forced
24 in this decision to close certain mines simply
25 because we can see no other financial or operating
26 results or conclusions.

27 MR. CHAIRMAN: You are stating that
28 from the standpoint of the interests of the ownership
29 in the mine?

30 MR. FAIRLEY; That is right, and to
some extent too, Mr. Commissioner, the interest of



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2 these communities and the people employed, for this
3 reason, that if industry is not put on a sound
4 financial basis, the whole industry will become
5 bankrupt, and then instead of maybe a thousand or
6 two thousand or even three thousand people being
7 out of work, there will be nine thousand people
8 out of work.

9 We feel that aside from the interests
10 of the owners of the Company, because it has been
11 pointed out in the brief that the owners have
12 gotten nothing out of this company anyway --

13 THE CHAIRMAN: I quite appreciate that.
14 I did not intend to take that in the narrow sense.
15 The interests of the Company may be said to be
16 involved in the interest of the community.

17 MR. FAIRLEY: Yes, sir. That is
18 our position. Yes, sir, that is correct.

19 MR. MARSH: I would like to ask
20 Mr. Gordon what is the life expectancy of No. 18?

21 MR. GORDON: 7 to 8 years.

22 MR. MARSH: The reason I ask
23 that question, Mr. Justice, - I just asked Mr.
24 Gordon what was the life expectancy of the 18 colliery,
25 and the answer he gave was 7 years.

26 THE CHAIRMAN: Yes. I was just
27 looking at the expectation - perhaps "expectancy" may
28 be the technical term - in 1945, and that was 31.
29 Since then, well, 15 years have elapsed, giving an
30 expectancy of a balance of 16, and you think?

MR. GORDON: 7 or 8 years. The output



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has been very largely increased. The output taken from 18.

MR. MARSH: What is the life expectancy of the McBean?

MR. GORDON: Life expectancy of the McBean at this time is probably about 15 years.

MR. MARSH: And Florence, if it was allowed to --

MR. GORDON: If it was allowed to go, it would probably be about 10 to 12 years at the outside.

MR. MARSH: And Princess?

MR. GORDON: Princess has a very short life.

MR. MARSH: The point I was making there, Mr. Justice, you have Florence with roughly a 10-year life, you have the McBean - 18 with roughly 7-year life. Now you mention 16. We don't know that possibly in the near future, and in the course of 7 more years, 18 would have been lost naturally. 18 will be lost naturally. He mentions also on Page 25, "should additional outputs over the capacity of the remaining collieries be required at a future date the Dominion Coal Company can open up a new colliery in high grade coal near Lingan".

Where is the money coming from? My point is this, Mr. Justice, if that new market we will assume opens next year and 16 has been closed, and they say they can open a new mine in Lingan, they must have some money. I don't know where it comes from for we



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2 don't have any accounting of their finances.

3 Why not open a new mine before the old
4 mine is closed and alleviate distress and hardship
5 which automatically follows the closure of a mine.
6 The statements conflict.

7 THE CHAIRMAN: Perhaps Mr. Gordon can
8 explain that.

9 MR. GORDON: The point is just this
10 sir: There is no market, and there is no market
11 in the immediate foreseeable future. If there
12 is no possibility under those conditions - unless
13 markets are found, there is no possibility of keeping
14 these collieries in operation and keeping the Company
15 sound enough to carry on its operations.

16 MR. MARSH: Mr. Justice, the main
17 point in your lack of markets is high cost production.

18 THE CHAIRMAN: Not wholly.

19 MR. MARSH: I am using that as one
20 point and the encroachment of cheap foreign oil.
21 Now, we feel that possibly if some action is taken
22 on your part, and we are given protection from oil,
23 that the simplest and easiest way to cut the high
24 cost production would be to obtain a new mine. Isn't
25 that right?

26 Therefore this market which Mr. Gordon
27 refers to could possibly exist next week, the week
28 after, or the week after that. So therefore our
29 position is why then, why then not do the thing which
30 is better for everybody and which would cause less
hardship and less suffering for everybody?



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2 If you are going to make a statement, at
3 least you should be prepared to follow it through,
4 and these things are hard to understand, difficult
5 to understand. I think you can understand that
6 point.

7 THE CHAIRMAN: Well, of course --

8 MR. MARSH: The logical thing would be
9 to do before you close the mine, have another mine
10 for the men to automatically move from the old mine
11 to the new mine, and if the reason he gives for
12 opening the mine in the very near future is due to
13 action taken on your part, why not do it that way.

14 THE CHAIRMAN: There is the assumption
15 that these conditions are going to continue as they
16 are today. You must not think it is only outside
17 oil, for in the Province of Ontario, American oil
18 is being driven out by Canadian oil and Canadian gas.
19 We haven't gas here, but certainly Canadian oil --
20 I don't know in what quantity, if any, it has permeated
21 the Maritime Provinces, but sooner or later they will,
22 because my information is that Alberta is allowing
23 an extraction of about 40% of the available capacity
24 for oil.

25 They are anxious to realize that and take
26 much more, so it is not simply a mere question of
27 the costs. Even if increased subventions were
28 introduced, it would bring the average price down,
29 but it would not bring it within an oil competition
30 range, would it?

MR. GORDON: Not at the present time, no.



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2 THE CHAIRMAN: So it is not merely
3 that simplified, but it is quite in order, Mr.
4 Marsh, for you to bring out that point, instead of
5 continuing to close these mines and not operate
6 anything, operate a cheaper mine, and in that way
7 reduce your costs, but the question still remains
8 can you introduce it to meet the oil costs without
9 taking other effective steps?

10 MR. MARSH: Well, I refer to tariffs and tax
11 on oil, and I can also refer back to 1944. In the
12 last 15 years we have lost 1 million 300 tons market
13 in our natural market. 1 million 300 thousand tons
14 of coal.

15 If we had that market today, had the
16 protection been given to coal from oil, and had the
17 Coal Company been more progressive and had they not
18 changed to just keep closing mines, closing mines and
19 closing mines, - what we have now, we have 8 old
20 mines.

21 THE CHAIRMAN: Are you going to write
22 off all the remaining reserves of coal to that extent
23 in this district? What I suggest, Mr. Marsh,
24 is that those are very proper considerations to
25 be taken into account on any summing up, and I would
26 like to have that from you.

27 All that Mr. Gordon can give us is the
28 view that he takes, that continuing in the market
29 conditions of today with no new factors introduced,
30 it is not going to be economically practical to go
along with the complete operation of the present



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2 number of mines.

3 He can take that as the base, and on that
4 you can erect what argument is open.

5 MR. MARSH: Can I use this further
6 illustration?

7 MR. CHAIRMAN: Yes.

8 MR. MARSH: I go back to 1932, the
9 Duncan Commission Report, and their infamous re-
10 allocationn plan. It recommended in accordance with
11 the proposals of Dosco that four be closed and 2,515
12 men - about 25% of the labour force - be fired.
13 This was the re-allocation plan. The infamous
14 re-allocation plan. This was simply a proposal
15 to close certain mines and accept their coal from
16 already existing mines, and in this way, point number
17 one, curtail production, and point number two, cut
18 the cost by concentrating operations in fewer mines.
19 It was estimated by closing four mines and reducing
20 output and firing 25 hundred men, 60¢ per ton would
21 be cut in the cost. This was 28 years ago.

22 THE CHAIRMAN: What are you reading
23 from?

24 MR. MARSH: This is the history of
25 the United Mine Workers - the private history, and
26 I will loan it to you, but this is from the Duncan
27 Commission Report in 1932 and my point is this; here
28 we are 28 years later in 1960 with the same old
29 thing. We are very progressive.

30 THE CHAIRMAN: Conditions have radically
changed, for in 1932 there was no question of oil,



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2 and there was no question of gas, and the market
3 conditions of today, all over the western world,
4 have been brought about in an extraordinary degree
5 in the last five years by oil.

6 You see, only three years ago, England
7 and Western Europe envisaged a new era for coal,
8 and in three years that has been completely changed.
9 Coal is setting thousands of men - 75 thousand men
10 idle from the mine.

11 All I am suggesting is, and I would be
12 very happy to hear anything that you have to say
13 and I thoroughly appreciate your position. I think
14 I would feel as you do today if I were representing
15 the miners, but I don't know if we can make much
16 advance with Mr. Gordon because he has given the view
17 of the Company, and the Company takes into account
18 I think a measure of degree the fact that its interests
19 extend to the welfare of this community.

20 Now, I have seen the community. I know
21 exactly how the welfare of this community is wrapped
22 up in the continuance of normal operations, and if
23 you can extract any further facts from Mr. Gordon,
24 well you are quite at liberty to do that. That
25 is your right. I would prefer if we leave
26 the question of argument on it until later.

27 MR. MARSH: I do not wish to refer
28 only to New Waterford, for naturally I represent
29 all the men in the district, and I wish to continue
30 in Glace Bay, to the tunnel.

THE CHAIRMAN: That is all right. Any



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2 factual matter, you are at liberty to get anything
3 you want as the basis of your argument.

4 MR. MARSH: I want to find out just how
5 much it would cost to complete the tunnel.

6 THE CHAIRMAN: That is all right. You
7 may ask Mr. Gordon any questions of that sort that
8 you think you should.

9 MR. GORDON: Let me clear something
10 up so there won't be any misunderstanding at the
11 present time. Our markets are very limited.
12 We can't get the markets to take the full tonnages
13 of coal that we can produce, and it would appear that
14 the markets just are not there. Nor as far as
15 we can see, are the markets going to be there in
16 the limited future or within the next few years.
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2 We are left in this position, that our
3 mines are going to work on a curtailed working plan
4 period during the next few years. The result is
5 going to be that our cost of production will be so
6 high that the industry will be bankrupt.

7 What we are trying to do is to do the
8 best for the most. We have no desire to shut down
9 collieries if closures can be avoided, and the Industry
10 allowed to move forward at a profit. I did not
11 say that Lingan Colliery would be opened immediately.
12 What I said was, that should additional outputs
13 over the capacity of the remaining collieries be
14 required at a future date, I do not know when, but
15 if and when the additional tonnage is required, that
16 will be the time that this pit will be opened, provided,
17 as Mr. Marsh has pointed out, we can obtain the money
18 or find the money to do the work.

19 MR. MARSH: That is what I am looking
20 for, any alternative for the closure of 3 mines.
21 What we are looking for is to maintain the Industry
22 in its present productive capacity. As I mentioned
23 before, the future could be next week, the week after
24 or the week after that. We are told by everybody,
25 economists, forecasters, and so on that in the near
26 future, in fact by the middle 1960's there will be
27 an increased demand for our products in the Dominion
28 of Canada. We were told in Halifax by the
29 Nova Scotia Light and Power Company that there will
30 be a demand for our products due to the increased
demand for electricity, and that there will be an



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2 increase in the Province of Nova Scotia alone, not
3 taking into consideration the tremendous forecasted
4 increase in Ontario, as high as 8 million tons in
5 1968.

6 In the light of the fact that this increased
7 demand for our product is forecast, and in the light
8 of the fact that Canada is supposed to be a growing
9 and progressive country, are we then going to be
10 caught in four or five years' time with an increased
11 demand for coal and without the facilities to produce
12 it?

13 That does not make sense to me, and these
14 are not my words, these are the words of experts,
15 economists. They are not my words.

16 MR. GORDON: All I say is if we have
17 to wait until 1968 to get those additional markets,
18 it won't be 3 collieries that will be shut down, the
19 whole company, long before that time, will be bankrupt.

20 MR. MARSH: Next year in Ontario
21 approximately one half million tons of coal for Thermal
22 Power Production is forecast by the Ontario Hydro
23 Commission, and following that it is forecast a
24 million and a half tons will be required up until a
25 maximum of 8 million tons in 1968, so this increased
26 demand begins next year and keeps continuing year
27 after year, according to these experts.

28 THE CHAIRMAN: I would like all the
29 material facts before the Commission from the rep-
30 resentatives, and then we can hear your arguments on
that. This is really not a question of argumentation
today. We are getting at the facts as they are



1
2 seen by the Company, and those facts can be challenged
3 as facts. I think they are contentious
4 acknowledgements. I think you have listed every-
5 thing you can so your contention is, don't close these,
6 open the Lingan. That is understandable, but I
7 do not think we can get any more questions on the
8 facts.

9 MR. MARSH: All I wish to mention is,
10 why close up the mine, if by completing the tunnel
11 it would save Caledonia? We would like it completed,
12 and on the north side Mr. Gordon mentioned the coal
13 reserves. On the north side, before Florence
14 was closed we would like to see another mine replace
15 Florence, and do it systematically.

16 THE CHAIRMAN: Those are representations
17 you will have every opportunity to make in any form
18 you wish, but at the present time you are getting
19 some of the facts as Mr. Gordon sees them, and it may
20 be that something further will develop, but at the
21 present time that is all we can get, on the statement
22 of fact.

23 MR. GORDON: Yes.

24 MR. MARSH: I would like to ask if the
25 Company has applied as yet to the Federal Government
26 for the loan for the Wash Plant?

27 THE CHAIRMAN: I think he told us that
28 they had, and had been turned down and they were
29 composing a new application.

30 MR. GORDON: What we are doing at the
present time is preparing a new set of plans for



1 submission to the Government.

2 MR. MARSH: Could I find out how long
3 it is since they were turned down?

4 THE CHAIRMAN: I think the question is
5 whether or not the Coal Company actually desires a
6 washing plant. At the moment I have not any
7 doubt in the world that it does desire a Washing
8 Plant, because I went through the existing Washing
9 Plant and it is recognized by everybody that it is
10 meeting the demand of the public, because they are
11 becoming more particular. I suppose I am right in
12 that?

13 MR. GORDON: Yes sir.

14 THE CHAIRMAN: They are demanding this
15 and that and other specifications of the coal that
16 were not known 15 years ago.

17 MR. GORDON: Even less than that, sir.

18 MR. MARSH: So you will understand us
19 a little better, I would like to refer to the MacNab
20 Conciliation Board.

21 THE CHAIRMAN: What is that?

22 MR. MARSH: This was a presentation
23 my in the Company.

24 THE CHAIRMAN: In what connection?

25 MR. MARSH: Back in 1956 or 1957 a
26 Conciliation Board over wages was held, and I would
27 like to read an excerpt from it;

28 "A Wash Plant has been erected at the
29 Old Sydney Collieries, to handle the outputs of that
30 Company's mines. This Washery served as a Pilot Plant
for a much larger washery necessary in the Dominion



1
2
3 operations. The Dominion Plant is presently under
4 design and will be started early in the spring of 1957.
5 It will be completed during the following year."

6 MR. GORDON: Yes, that was not approved
7 by the Coal Board.

8 MR. MARSH: It said it would be completed
9 in 1958. I do not think the application was in
10 before then, was it Mr. Gordon?

11 MR. GORDON: Actually, Mr. Marsh, for
12 your information sir the steel for the large plant
13 to be erected in Sydney was actually very largely
14 fabricated by the Robb Company of Amherst, and a great
15 deal of that steel would be there at that time, and
16 it was only when we had not sufficient funds remaining
17 in the loan and in our own funds set aside for
18 mechanization that we had to apply for more, it was
19 then that the application was turned down and work
20 could not be gone on with, and actually half the
21 steel was fabricated for the plant.

22 MR. MARSH: The point in question is,
23 our men are puzzled. They understood that the seven
24 and one half million dollar loan from the Federal
25 Government, the initial loan, which the Dominion
26 Coal Company procured under the Maritime Coal
27 Assistance Production Act, would cover the erection
28 of a Wash Plant. The money was granted and still
29 no Wash Plant was erected, and the position we are
30 in now due to the fact we have no Wash Plant, is
overproduction, lack of markets, and we are facing mine



1
2 closures.

3 THE CHAIRMAN: I quite agree. The
4 trouble is in making judgments. You are making
5 them in the absence of the knowledge of all the
6 facts. It is a question of confidence in those
7 who are directing the affairs of the Company. I
8 cannot assume that those who are directing are not
9 sincerely desirous of maintaining this operation on
10 such magnitude.. Sometimes these matters are not
11 explained because the explanation is really not
12 relevant to the progress of the negotiations. You
13 cannot rush these things. It would cost approximately
14 5 million dollars, I think you said, for a new
15 Washing Plant.

16 MR. GORDON: The new Washing Plant, the
17 large one, would cost roughly 5-3/4 million dollars
18 all together.

19 THE CHAIRMAN: What would its capacity be?

20 MR. GORDON: 22 thousand tons in 16 hours.
21 The reason for that large capacity was the fact that
22 during the summer months we would have to wash some
23 of the bank coal. We wash our current output and
24 a certain tonnage of bank coal as well.

25 MR. MARSH: perhaps, Mr. Chairman,
26 after this is over I will give you a copy, a very
27 extensive copy, of the mining history we have
28 compiled from 1900 to 1941. It will give you
29 an insight and an idea of why our people are mistrustful.

30 THE CHAIRMAN: That is quite in order.

MR. MARSH: When you read that, you will



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understand why I mentioned the Duncan Commission, and why I mentioned at that time there were four mines recommended for closure, but the four mines did not close at that time. Twenty-eight years later the same things are repeated. As I said before, since the inception of coal mining in the Province of Nova Scotia the same things have been happening. I think this history, which is in complete detail, will possibly supply you with a good background of the Industrial strength which has been carried on in this area over the years. You can check the Carroll Coal Commission. It was so bad our people looked for nationalization back in 1945, and you will need this to understand why I question as I do.

THE CHAIRMAN: I quite agree I think some information of the back ground would help. I already have some information, but my experience is sometimes it is wise to forget the background and see if we cannot make a new start. I am hopeful a different atmosphere will prevail. We know, as everybody knows, today that coal is almost in the position of a superseded fuel. That is what you start with. You know what has been happening in the United States, in Belgium, in France, in Germany and England. We cannot escape the facts of these things. What we are trying to arrive at here now is some means by which we can cushion that fact and make its total destruction - you might call it that - as slight as possible.



1 I think everybody is agreed upon the
2 desirability of that. The first thing to do is
3 not to plan, but simply to find out what the facts
4 are, economics, political and social. Let us
5 do that and then base any contention you see fit, or
6 anybody sees fit on those facts. I realize the position of the
7 people here who have spent their lives here and have been mining
8 for generations. Nothing is more difficult. Sometimes some
9 degree of trouble is unavoidable.

10 What I would like to see is, if most of it,
11 virtually the whole of it, is avoidable. Let us
12 get the facts to see if from those facts we can arrive
13 at such a solution, and let us leave the arguments
14 until later.

15 MR. MARSH: As long as we can have an
16 opportunity later.

17 THE CHAIRMAN: You will have plenty
18 of opportunity to urge these things. Do not think
19 for a moment I am deprecating at all. Some times an
20 argument that proceeds from an emotion has some
21 intellectual facts underneath it that is not particularly
22 articulated. But in any event we are concerned
23 now with getting the facts and the social, economic
24 and community implications.

25 MR. MARSH: I would like to observe,
26 Mr. Chairman, that the one fact underneath it, is the
27 fact that the same procedure was mentioned 28 years
28 ago as was mentioned today.

29 THE CHAIRMAN: That may be, I do not
30 know, but we are here now and as they say a great deal



1
2 of water has flowed over the dam since 1945 and new
3 circumstances have arisen that were not dreamt of
4 in 1945. At that time coal mining was largely
5 a question of production. Today it is a question
6 of consumption and we have to adapt our thinking to
7 a new aspect of it, but that can be discussed at the
8 proper time.

9 MR. MARSH: I am willing to co-operate
10 with the Commission.

11 THE CHAIRMAN: I know you are. I do
12 not have to be told that. If there are no further
13 questions, Mr. Gordon, we might proceed with the next
14 representative of the Company.

15 MR. MARSH: Could I gather we can
16 ask the questions later? They will all be slightly
17 argumentative. We will save that for later.

18 MR. GORDON: Then I will ask the
19 questions. Thank you, sir.

20 MR. RAND MATHESON: Mr. Commissioner,
21 in connection with transportation on Page 29;

22 The basic submission of the Dominion Steel
23 and Coal Corporation, Limited to the Royal Commission
24 on the Coal Industry in Canada (Carroll Commission)
25 with reference to the effect of transportation costs
26 on the sale of Nova Scotia coal, had this to say:

27 "..... to a St. Lawrence port of
28 discharge, Quebec City, Three Rivers and
29 Montreal, it has been possible to balance
30 the delivered cost of Nova Scotia coal by



1
2 a cost of freighting much less than the cost
3 of rail and water transportation of coal from
4 United States mines, plus the protective duty
5 on U.S. coal. This margin of advantage to
6 Nova Scotia coal has always been a very small
7 one, and during two war periods, 1914-1920,
8 and the unknown duration of the war that began
9 in 1939, this water-borne traffic has become
10 impracticable because of shortages of ships.
11 Leaving these war-time disturbances on
12 one side, and looking forward to return of
13 the lower water-freighting costs on which
14 the Nova Scotia St. Lawrence coal movement
15 is founded, it may be expected that in the
16 future as in the past the effective limit
17 of Nova Scotia coal against imported United
18 States coal will end at the St. Lawrence port
19 of discharge from steamer."

18 (Exhibit No. 1 at Pg. 57 - our underlining)

19 Also in the Corporation's Brief on Markets to
20 the same Commission, the following statement was made:

21 "It is obvious that without tariff protection
22 and other assistance, little if any, Nova Scotia coal could
23 have penetrated the St. Lawrence market in 1939. Prices
24 of American coal were very unstable in this period and it
25 was virtually impossible to determine exactly what
26 had to be met, so many and varied were the fluctuations".

26 In appendix "E" supplementing the Brief, it
27 was shown that to Montreal, for example, the price of
28 Dominion coal in 1939 was \$5.25 per short ton and, in
29
30



1
2 1944, \$7.92 vis-a-vis U.S. coal via Lake Ontario and
3 Lake Erie ports in 1939 - \$5.28, and in 1944 - \$7.42
4 (the latter were inclusive of dock charges). If one
5 discounted the abnormal war year and considered only
6 the last pre-war year, the competitive situation at
7 St. Lawrence ports, even then, was quite marginal.

8 While the matter of subventions is discussed
9 in another section, it is of significance to note
10 that subventions for the movement of coal by water
11 from Nova Scotian ports to points in the Province of
12 Quebec were first established by Order-in-Council No.
13 P.C. 3589 dated September 12, 1947 and, since that
14 time, it has become the policy to provide subventions
15 for the movement of coal directly by water.

16 The Order-in-Council first initiating
17 the assistance stated, among other things, that "the
18 cost of water transportation from Nova Scotia ports
19 to points in the Province of Quebec is such that Nova
20 Scotia coal cannot successfully compete with United
21 States imported coal currently being used in large
22 quantities."

23 Since the last Royal Commission on Coal,
24 transportation costs have reflected the post-war
25 inflationary trend with resultant increases in both
26 the rail and water factors from U.S. and Canadian
27 origins. In both countries the coal rail-rates were
28 singled out for lesser increases than were authorized
29 generally.

30 The principal U.S. coal origins, for assessing
the competitive relationship with Nova Scotia coal,
are the Clearfield, Pa. and Westmorland, W.Va districts.



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However, United States bituminous coal destined to Eastern Canada, originates at other mining districts in the States of Pennsylvania and West Virginia in addition to Virginia, Ohio, Kentucky, Michigan, Illinois and Indiana.

Most of the coal traffic to Canada moves via lake ports under a special rate structure known as "lake-cargo coal rates". The haul to the lake ports is regarded by the railways as being part of a through movement and the rates thereon are lower than rates on coal not destined beyond the ports.

The combination of the lake-cargo rail rates and the bulker-type water rates from the Clearfield and Westmorland districts via Sodus, N.Y. to Montreal, Three Rivers and Quebec, were as follows in 1959.

In passing I should say that the mileage from Clearfield to Montreal, to Sodus by rail and water-

THE CHAIRMAN: How do you spell Sodus?

MR. MATHESON: Sodus.

THE CHAIRMAN: That distance is what?

MR. MATHESON: 548 miles.

THE CHAIRMAN: Is that water?

MR. MATHESON: It is made up of rail miles from Clearfield to Sodus, 284, and water mileage from Sodus to Montreal, 264, making a total of 548 miles. The other district figures from Westmorland to Montreal, the rate is 554, Three Rivers, 569 and Québec, 594 miles. Incidentally the mileage is relatively greater, and I can supply the figures.

THE CHAIRMAN: Where is Sodus?



MR. MATHESON: It is on Lake Ontario east of New York State, east of Buffalo. There are two ports there, Oswego and Sodus.

THE CHAIRMAN: How far from Oswego?

MR. MATHESON: I have not got it right here, but I can get it for you.

THE SECRETARY: I believe it is 50 miles east of Rochester.

Rates in cents per 2000 lbs.

From:	To: <u>Montreal</u>	<u>Three Rivers</u>	<u>Quebec</u>
Clearfield District Rail factor to Sodus, N.Y. plus dumping, less exchange @ 4.9%	315	315	315
Water factor bulker- type vessel plus seaway toll	$\frac{215}{530}$	$\frac{230}{545}$	$\frac{255}{570}$
From:			
Westmorland District Rail factor to Sodus, N.Y. plus dumping, less exchange @ 4.9%	339	339	339
Water factor bulker- type vessel plus seaway toll	$\frac{215}{554}$	$\frac{230}{569}$	$\frac{255}{594}$ (*)

During the last year the Eastern U.S. railroads reduced their lake cargo rates on coal destined to Canada by seven cents per ton. Moreover, a reduction of 30¢ per ton was made by Western rail lines to Lake Michigan ports on coal destined to Canada. This was followed by reductions of 15¢ per ton from Eastern U.S. mines to Lake Erie ports on coal destined to ports



1
2
3 between Amherstburg and Sarnia, Ontario, and 30¢ per ton
4 to destinations north of Sarnia.

5 In relation to the existing rates, the cost
6 of freighting coal from the Clearfield District via
7 Lake Ontario ports to alongside dock, Montreal in
8 1939 (exclusive of any exchange) amounted to \$2,418
9 per ton of 2000 lbs. or more than one half the 1959 costs.

10 It was established before the Carroll Comm-
11 ission that, historically, the Quebec market constituted
12 an important outlet for Nova Scotia coal. Even despite
13 distance from the principal markets of Canada, the
14 Nova Scotia coal industry, perforce of the relatively
15 cheaper cost of transportation by water to St. Lawrence
16 River ports, was able, until more recent years, to compete
17 marginally with U.S. Coal along the St. Lawrence, assisted
18 only by a small duty. In 1939, for example, the cost
19 of moving coal from the Glace Bay Mines to alongside
20 dock at Montreal amounted to approximately 96¢ per short
21 ton.

22 In the study "The Nova Scotia Coal Industry"
23 prepared by Urwick Currie Limited for the Gordon
24 Commission, reference was made to the cost of freighting
25 coal by water from Sydney to Montreal as follows:
26 "The costs of hauling coal aboard these vessels varied to
27 a remarkable degree, ranging on the trip to Montreal
28 from \$1.00 per ton to \$3.50 per ton, depending on the
29 charter price, the ship's capacity, its speed and the turn
30 around time. The average water freight cost to Montreal
during 1955 was \$1.90 per ton, but because of increasing
boat rates, the 1956 cost is expected to be much higher



1
2 and will likely exceed \$2.40 per ton. Certain vessels
3 however, including the three DOSCO-owned ships, carried
4 a substantial portion of the total tonnage hauled at
5 a significantly lower cost than this average. For
6 example, of all tonnage moved to Montreal in 1955,
7 40% was carried by the single DOSCO-owned vessel, the
8 LOUISBURG." (*)

9 If one were to adopt the Gordon Commission
10 study's average cost of freighting coal by water,
11 Sydney to Montreal, then, in 1959, the cost of
12 freighting coal from the Glace Bay Mines to alongside
13 dock Montreal, would amount to about \$2.96 short ton
14 or over three times the cost in 1939. We can make
15 available to you the actual 1959 cost of transportation.

16 THE CHAIRMAN: Yes, I wish you would.

17 MR. MATHESON: We did not wish to have
18 this information made public, because we have to
19 charter ships, and the figure would prejudice us by
20 having the owners know exactly what our costs were.
21 In contrast, the cost of freighting rail and lake
22 from the U.S. Clearfield District to alongside dock
23 at Montreal increased by about 2.2 times over the
24 same period.

25 ROUTING

26 By Rail

27 With the exception of Newfoundland, practically
28 all the coal from the Sydney area to destinations in the
29 Atlantic Provinces, in 1959, moved by rail. There
30 was only one small lot moved by water, 35 tons
to a Nova Scotia Port. The volume that year amounted



1
2 to 654,405 tons. In contrast, the tonnage shipped
3 in 1946 was 991,592 which is the peak since that time.

4 To Central Canada destinations the rail
5 movement amounted to 480,198 tons compared with 110,
6 393 in 1946, and with only 25,780 tons in 1947. The
7 peak year for the period was in 1956, when the tonnage
8 reached 786,675. (*)

9 From the McBean operation at Thorburn, N.S.
10 and the Stellarton Washplant the movement is now mostly
11 all rail, except for the quantities distributed locally
12 from the chutes and a relatively small volume to
13 Pictou for ship bunkers and for furtherance. In
14 1959 the total all rail movement from the Stellarton
15 washplant amounted to 117,652 tons, of which 27,952
16 tons moved to Central Canada.

16 BY RAIL-WATER

17 In 1959 the coal tonnage to St. Lawrence
18 River ports amounted to 1,684,760 tons. This volume
19 represents the fourth largest since 1945, when
20 only 82,517 tons were carried by water to the Quebec
21 market. The 1959 breakdown of tonnages to the St.
22 Lawrence River ports is as follows:

23 They are broken down for the five ports,
24 Montreal, Quebec, Three Rivers, Chicoutimi and Sorrel.
25 To complete that the breakdown for previous years
26 is contained in appendices 16, 17 and 18.

27 THE CHAIRMAN: That includes coal
28 that was furthered from Montreal.

29 MR. MATHESON: By water or by rail as
30 they call "back haul", that would include that tonnage



as well.

Year	Destination	Owned Vessels	Time Charter Vessels	Trip Charter Vessels	No. of Trips	Total Net Tons
1959	Montreal	512,990	804,663	152,677	19	1,470.300
	Quebec	13,372	116,319	21,710	5	156,401
	Three Rivers	10,278	24,094	4,377	1	38,749
	Chicoutimi	-	16,033	-	-	16,033
	Sorel	-	3,277	-	-	3,277(*)

Page 101 following:



As a matter of interest and for comparison, in 1939 the total water-borne tonnage to St. Lawrence River ports was 3,267,208. In that year the coal fleet consisted of 17 vessels, three of which were company-owned and the balance were on long-term charter, that ranged from 3 to 12 seasons. The 1959 coal fleet consisted of three company-owned and seven time-chartered vessels. In addition, there were twenty-five voyages on a trip-charter basis.

That is to say, a trip-charter, Mr. Commissioner, the ship was just hired for one trip.

Unlike the pre-war period, the time-chartered vessels were only for one season, owners so far being reluctant to enter into long-term charters because of the low ebb in the world-charter market, except at rates relatively higher than the current indications from time to time would have justified.

The time-chartered vessels in the Company's coastal trading have been of U.K. registry. This has enabled the Company to obtain the benefits stemming from lower operational costs of those vessels vis-a-vis ships of Canadian registry. In this connection the Royal Commission on Coasting Trade in its report dated December 9, 1957, in discussing a proposal to restrict the Canadian coasting trade to vessels registered in Canada, said as follows:

"Applied to the eastern coasts and the Gulf of St. Lawrence, the restriction could not fail to cause a substantial increase in transportation costs for a large volume of



1 commodities carried in the coasting trade,
2 with similar effects in some international
3 services. In no case would there be a
4 commensurate benefit in quality of service
5 or in other directions, and in some cases
6 the service might be expected to deteriorate."

7 While benefits accrue from being in a position
8 to charter vessels of Commonwealth registry, there are
9 the vicissitudes of the open market which make vessels
10 of such registry sensitive to the interplay of world
11 events. The coastal waters also attract, generally,
12 higher charter rates because of British North
13 America marine insurance warranty exceptions, the
14 cost of delivery and redelivery on this side of
15 the Atlantic, special coastal pay for U.K. crews in
16 Canadian waters and a limited season of about seven
17 and a half months.

18 THE CHAIRMAN: What is the special
19 coastal pay?

20 MR. WREN: That is a special pay Mr.
21 Commissioner that the owners of the U.K. registered
22 ships pay to the crew under an agreement with the
23 unlicensed seamen, or the crew members for trading
24 in coastal waters because perhaps of higher living
25 costs, or things of that kind.

26 The three company-owned vessels, the
27 ARTHUR CROSS, WABANA and LOUISBURG, were purchased in
28 1946 from the Dominion Government and were recon-
29 verted into single deckers for the carriage of bulk
30



1 cargoes and were registered in June of that year.
2 With the coming into service, in 1958, of the long-
3 term chartered vessel m.v. CHARLTON MIRA for the
4 Ore trade, two of those vessels were released to
5 the Coal trade entirely and one, on a part-time basis.
6 Because of their age, these three ships are reaching
7 the end of their course and will be due for their
8 next quadrennial survey in 1962. In relation to time-
9 chartered vessels of U.K. registry, the company-owned
10 vessels have been becoming more costly, thus reflecting
11 in increasing cost of freighting in the movement of
12 coal.

13 In 1959 coal to the Newfoundland market
14 was shipped partly by schooner and partly by
15 steamer. The total movement was 183,644 tons, of
16 which 54,120 tons were by trip-charter arranged by
17 Dominion Shipping. Incidentally, 85,503 tons were
18 handled by schooners to which Mr. Johnson made reference
19 this morning.

20 By Rail-Water for Transhipment:

21 Out of the total of 1,684,760 tons that
22 were carried by water to St. Lawrence River ports
23 there were 369,844 tons (*) transhipped at Montreal
24 by water for Great Lakes ports, leaving a balance
25 of 967,997 tons to be distributed locally or transhipped
26 to inland points, the latter mostly by rail.

27 THE CHAIRMAN: We will now adjourn until
28 half past two.

29 ---Whereupon the hearing adjourned for lunch.

30 (*) Appendix Nos. 20, 21, and 22.



1 --- Hearing reconvened at 2:30 p.m.

2
3 THE SECRETARY: Mr. Matheson will you continue
4 please?

5 MR. MATHESON: The next section Mr. Commissioner
6 is THE INCIDENCE OF TRANSPORTATION CHANGES
7 The Rail-Rate Structure and Postwar Increases:

8 Within and from the Maritimes: The rates in
9 this territory largely reflect the pervasive influence
10 of water competition. Generally, however, the rates
11 to and from points in the Maritimes are predicated on
12 what is known as the "Maritime Mines Scale" which is
13 roughly 20% below the normal scale.

14 THE CHAIRMAN: When you say "normal scale" do
15 you mean the scale under the Maritime Freight Rate Act?

16 MR. MATHESON: It would be the normal mileage
17 scale under the Maritime Freight Rate Act. This would
18 be 20% below that.

19 THE CHAIRMAN: That in turn is 20% below the
20 regular, normal rates?

21 MR. MATHESON: That is right sir, without the
22 Maritime Freight Rate. There are many exceptions to
23 the Maritime Mines Scale, and while the bases for some
24 of these rates are vague or hidden in old records, compe-
25 tition has generally been basic in the promulgation of
26 most.

27 Indicative of the competitive influences are
28 the following rates on Slack coal compared with the rates
29 on other types of bituminous coal:
30



Rates in cents per ton of 2000 lbs.

From Sydney,
N.S. ex S.&L. Rly.

From Sydney Mines,
N.S.

To:	Slack		Slack	
	<u>Competitive</u>	<u>Regular</u>	<u>Competitive</u>	<u>Regular</u>
Halifax, N.S.	224	248	235- $\frac{1}{2}$	267- $\frac{1}{2}$
Bathurst, N.B.	241- $\frac{1}{2}$	241- $\frac{1}{2}$ * 296	247	247* 311- $\frac{1}{2}$
Saint John, N.B.	281	286	296- $\frac{1}{2}$	301- $\frac{1}{2}$

*Effective January 25, 1960

THE CHAIRMAN: Can't you say there that Bathurst has no competitive rate?

MR. MATHESON: It has a competitive rate now sir. The rate of 296 was the regular, normal rate.

THE CHAIRMAN: Why does the 241- $\frac{1}{2}$ come in there at all on the regular?

MR. MATHESON: That was a case of typing. Only one should have been shown; 241 $\frac{1}{2}$ as the competitive rate and the 296 should have been indicated there as just the rate before the reduction. In other words, it is not used now.

THE CHAIRMAN: 241 $\frac{1}{2}$ is the competitive rate?

MR. MATHESON: It is the competitive rate.

THE CHAIRMAN: 296 would be the normal?

MR. MATHESON: That is right sir.

The Maritime Mines Scale as reduced under the Maritime Freight Rates Act, has been applied as far west as Quebec and Montreal with intermediate points graded to reflect generally this basis. (*) There appears to be no standard basis in connection with Maritime coal to



1 stations west of Montreal. The competition of United
2 States coal has in many cases influenced variations in
3 the rates.

4 Through rates from the mines to railway
5 stations beyond Sydney have been predicated on combina-
6 tions; that is to say, the rates on S. & L. Railway
7 have been combined with those of the C.N.R. to obtain
8 the total rates to destinations on that Railway. By
9 the method prescribed by the Board of Transportation
10 Commissioners in holding down increases in rail rates
11 on coal, the same authorized amounts were applicable
12 whether the haul was over one or more lines. For example,
13 in the last increase authorized by the Board effective
14 on December 1, 1958 the flat increase was 22¢ per ton
15 and by the application of the Maritime Freight Rates
16 Act this resulted in an increase of 17½¢ in the M.F.R.A.
17 territory and 18¢ on coal moving to stations west of
18 Levis and Diamond, Quebec. (**) The division of that
19 increase accruing to the S. & L. Railway amounted to
20 2-3/4¢ per ton.

21 Since 1946 the rate on slack from Sydney Mines
22 to Halifax, N.S. has been increased 47% compared with
23 bituminous coal, in general, by 67%. Whereas, from
24 Sydney Mines to Montreal the increase was 21% in the
25 same period. The lower percentage increase to Central
26 Canada reflects the greater mitigating effects of the
27 flat rate increase method on long hauls and, also, the
28 increased percentage reduction under the Maritime Freight
29 Rates Act established July 1, 1957.

30 (*) Appendices Nos. 29 & 30 (**) Appendix No. 31

1 THE CHAIRMAN: What does that do to the
2 original?

3 MR. MATHESON: The reduction became 30% of
4 the preferred area proportion of the freight rates
5 instead of 20%.

6 THE CHAIRMAN: That 30%, were adjustments made
7 on the 30 that would have been made on the 20?

8 MR. MATHESON: The 30% was substituted instead
9 of the 20, whatever the rate may be.

10 THE CHAIRMAN: It did not follow all of the
11 modifications that it followed on the 20%? Take the
12 22¢.

13 MR. MATHESON: Oh I see what you mean, referring
14 to the slack amount.

15 THE CHAIRMAN: Was that reduced by 30%?

16 MR. MATHESON: What I think was done there
17 Mr. Commissioner was that they went back to the original
18 bases of rates and added on all the increases and then
19 applied the 30 per cent. I think they had to go back
20 to the normal.

21 THE CHAIRMAN: For instance, what would they
22 do in the 22¢ flat. You see that means $17\frac{1}{2}$ by taking
23 the 20 per cent within the Maritime territory. Would
24 they apply 30 per cent in the Maritime territory?

25 MR. MATHESON: I believe sir the 18¢ is the
26 end result by applying the 30 per cent. It is a little
27 involved, the calculation, that is used in striking at
28 it because of averaging, because of so many distances
29 that would be involved going to the central territory.
30



1 Roughly speaking, the 22¢ within the territory is
2 a 20 per cent reduction, which is 4.4¢, off and rounded
3 out to the half cents, 17½¢.

4 THE CHAIRMAN: Thirty per cent would be 6.6.

5 MR. MATHESON: You see it would be only 30
6 per cent on the preferred area in proportion as far
7 as Diamond Junction.

8 THE CHAIRMAN: I mean for 17½¢ within the
9 M.F.R.A. territory.

10 MR. MATHESON: That is right.

11 THE CHAIRMAN: It would be a deduction of
12 6.6 instead of 4.4. That doesn't matter. I was just
13 curious to know.

14 MR. MATHESON: I can work that out for you,
15 just to clarify it sir. This is the end result of the
16 adjustment. Even despite the "hold-downs" in increases
17 and the establishment of some competitive rail rate
18 reductions, potential outlets have been lost to other
19 sources in the Maritime territory. Increased freight
20 rates, as a factor in the laid down costs, have contributed
21 to the coal traffic erosion.

22 It should be pointed out that the railway per
23 se, in seeking increases in rates in the postwar period
24 singled out coal for exceptional treatment principally
25 by flat amounts rather than straight horizontal increases
26 and the Board of Transport Commissioners adopted the
27 principle and, in its judgments in the so-called "21%
28 rate case" dated March 30, 1948, it justified its action
29 in these words:
30



1 "Coal and coke are commodities of most wide
2 and general use and of such vital importance
3 to industry and to the people of Canada as a
4 whole, that I am impressed with the desira-
5 bility of limiting, as far as reasonably
6 practicable, any additional burden in the way
7 of advance of freight rates on this class of
8 commodity, and of spreading the advance
9 equally over the whole of such traffic, regard-
less of the length of haul. The applicant
railways have, by their application, asked for
an increase on a sliding scale based on the
amount of the present freight rates per ton. I
would instead grant a flat increase of 25¢ per
ton on coal and coke moving in Eastern and
Western Canada respectively." (*)

10 (*) J.O.R. - Volume XXVIII No. 1 @ pp 66 & 67.

11 Within Central Canada: The so-called "Eastern
12 Rate Case" (*) constitutes the basis for the special
13 commodity rates on coal in Quebec and Ontario.

14 The structure that had existed previously had
15 revealed to the Board anomalies which dictated the require-
16 ment of a more symmetrical blocking and a more consistent
17 inter-relation of rates. The influence of competition
18 in the area has been reflected in a continual change
19 in the coal rates and the opening of the Welland ship
20 canal facilitated a greater water movement with resultant
21 decreases in the all-rail rates via the Niagara and
22 other gateways. To mesh with the water movement, the
23 railways published the so-called "ex-water rates"
24 applicable on coal received by water at coal docks
25 along the St. Lawrence and the Great Lakes waterway
26 for the rail movement inland. These rates are, in
27 the majority of cases, depressed below the mileage rates
28 and there appears to be no set basis since the individual
29 rates were influenced by the competitive conditions and
30 circumstances which obtained at the time.



1 From the United States: The all-rail coal
2 rates applicable from the mining districts in the
3 United States to Canadian destinations consist of:

4 (a) Specific commodity rates published by
5 Canadian railways on bituminous coal ex
6 United States railways at border gateways
7 to destinations in Eastern Canada. These
8 rates are known as "proportionals" and
9 are combined with rates of U.S. carriers
10 to the interchange border points.

11 (*) 22 Canadian Railway Cases Pg. 45.

12 (b) Joint-through international rates via
13 certain gateways, reflecting two-factor
14 combinations.

15 Whether the rates are combinations or joint-through
16 factors, they are of significance in relation to the
17 coal movement from Nova Scotia in that they constitute
18 one of the items in striking at the laid-down cost of
19 U.S. coal at various destinations in Eastern Canada.

20 Proposed Equalization of Coal Rates West of
21 the Maritime Territory.

22 The coal rate structure west of Diamond
23 Junction and Levis, Quebec, are currently under study by
24 the Board of Transport Commissioners in connection with
25 the General Freight-Rate Investigation directed by
26 Order-in-Council P.C. 1487, dated April 7, 1948 (Equali-
27 zation Case) and pursuant to Section 366 of the Railway
28 Act (National Freight-Rates Policy). While the all-rail
29 rates from the Maritimes to destinations within and
30 outside the territory are excluded from this investigation,
yet, the ex-water rates on coal from St. Lawrence River
ports to inland points may possibly be involved. (*)

The question arises: What effects would the
equalization of coal rates likely have in respect of



1 movements of coal ex-water on the laid-down cost of
2 Nova Scotia coal to the various destinations? The
3 answer, of course, is contingent upon the basis that is
4 finally prescribed by the Board of Transport Commissioners
5 and what rates are excluded. Incidentally, competitive
6 rates as such are excluded from the equalization.
7 This Company's studies indicate, however, that if the
8 "ex-water" rates are subject to equalization then,
9 unless a scale is established that takes cognizance of
10 the relatively short distances in the ex-water movement
11 of coal and the competitive circumstances enveloping
12 the traffic - qua - the establishment of agreed charges
13 from Three Rivers to Shawinigan and Grand' Mere, for
14 example, then the equalization of rates would, on balance,
15 result in increased costs in the movement of coal which
16 would either require increased subvention payments or,
17 conceivably, result in market restrictions.

18 (*Appendix No. 28

19 St. Lawrence Seaway:

20
21 In the supplementary report of (*) the
22 Gordon Commission of the Nova Scotia Coal Industry, the
23 following observation was made:

24 "The St. Lawrence Seaway is expected to be
25 in operation in 1959, and whether it will
26 have an effect on the market price of coal
27 will depend on whether the ore carriers
28 will carry U.S. coal to eastern Ontario and
29 Quebec on their return down river. If they
30 do this, then it has been estimated that the
price of competitive U.S. coal will be
lowered by at least \$1 per ton and the sub-
vention cost under the conditions applying
in 1960 would increase by some two million
dollars a year. (underlining ours)



1 It is not expected, however, that the large
2 ore carriers will carry any appreciable
3 tonnage of coal in the early years of the
4 Seaway, because of lack of facilities for
5 unloading large ships and because the ex-
6 pected demand will outweigh the benefits
7 of earning extra revenue by carrying coal.
8 Accordingly no major provision has been
9 made in the sales estimate for losses from
10 this cause. After 1960, however, the cost
11 of holding the Quebec markets may increase."
12 (underlining ours)

13 (*) Pg. 17 of the Supplementary Report.
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1 In 1959 there was at least one instance of lower
2 transportation costs on coal from Great Lakes ports to
3 destinations along the St. Lawrence, which does give
4 some weight to the prognostication that "after 1960 -
5 sic - the cost of holding the Quebec markets may increase."

6 In this connection, a self-unloader vessel
7 transported U.S. coal last season from Lake Ontario
8 to the Quebec City area at a rate of \$2.00 per short ton,
9 including the seaway toll of 40 cents per ton compared
10 with the 1959 bulker rate of \$2.55 inclusive of seaway
11 tolls.

12 The word "bulker" there refers to ships
13 without self unloader equipment.

14 The over-all reduction, allowing for discharging
15 costs, amounted to approximately \$1.10 per ton. In this
16 particular instance the Coal Board met the situation.

17 Until the completion of the seaway, only vessels
18 capable of lifting approximately 2500 to 3000 short tons
19 of coal were possible from lake ports vis-a-vis Ocean
20 type vessels from Sydney to Montreal carrying up to
21 about 10,000 tons.

22 Costs of freighting by the large colliers from
23 Sydney to St. Lawrence ports have generally been re-
24 latively competitive with the small canalers for the
25 shorter hauls from the lake ports. At times the costs
26 per ocean vessel have been either somewhat lower or
27 higher than the current lake to St. Lawrence rates
28 depending upon world wide charter market conditions.

29 At the present time, coal depots along the
30 St. Lawrence are geared primarily to handle bulk-type



1 vessels.

2 A substantial volume of coal from U.S.
3 origins to Canadian Great Lakes ports is handled by
4 self-unloader vessels and a large number of receiving
5 docks with shallow drafts in that area are suitable
6 only for that type of vessel and to such ports a direct
7 water haul by the large ocean vessels from Sydney are
8 either physically or economically impossible. As a
9 consequence, a large part of the Nova Scotia coal
10 carried to Great Lakes ports in 1959 had to be transhipped
11 at Montreal to self-unloading lake vessels.

12 While there was no direct shipment of coal
13 last season from Sydney to lake ports, this will be
14 possible as ports are dredged to accommodate larger
15 draft vessels with resultant reduced transport costs.

16 As a matter of fact, at the present time we
17 are considering a proposal to use an ocean-type vessel
18 to either or both Hamilton and Toronto.

19 THE CHAIRMAN: What is the significance of
20 that in carrying expenses?

21 MR. MATHESON: Yes, Mr. Commissioner, just
22 roughly I think it would knock expenses down by somewhere
23 in the vicinity of 50 to 60 cents roughly. We have not
24 completed our negotiation, so we cannot come up with a
25 firm figure on what the water rate would be for the
26 ship in question, but there is room for reductions.

27 To facilitate a greater participation in the
28 future sighted coal requirements of the Great Lakes area,
29 large self-unloader vessels would have to be used to
30 carry coal from Sydney to the Great Lakes. It would



1 appear that, in the long run, the trend will be towards an
2 increasing number of piers not equipped for receiving
3 coal other than by self-unloader vessels.

4 The cost of providing facilities for discharging
5 coal at a relatively rapid rate is expensive and
6 industries are loath to make large capital expenditures
7 where alternatives are found -- even though, pro rate,
8 there is an added cost factor on each ton handled by
9 self-unloader vessels.

10 It is patent, therefore, that the St. Lawrence
11 Seaway, in relation to Nova Scotia coal, presents mixed
12 blessings providing, of course, that the Nova Scotia coal
13 is made competitive by subvention, or otherwise. But
14 basic costs, including the transportation factor, must
15 be kept at the very minimum.

16 Water Transport

17 For several years considerable attention has
18 been directed by the Company to its future steamship
19 requirements for the movement, inter alia, of coal
20 to markets along the St. Lawrence River and to potential
21 Great Lakes outlets. In the considerations it has been
22 necessary to keep in mind the present limitation of
23 pier facilities, the net cost result of improvements,
24 or alternative arrangements for loading and discharging,
25 and the most economical vessel units -- whether self-
26 unloader or otherwise, or a combination of both --
27 commensurate with the minimum sighted requirements for
28 coal; all to the end of obtaining the cheapest shipping
29 cost. In assessing these future steamship requirements,
30



1 cognizance has to be taken of what is likely to be
2 the future subvention policy in relation to the com-
3 petition of U.S. coals and the inroads being made
4 by other sources of energy. These present unknowns are
5 of paramount significance in the determination of a
6 long-term chartering plan and the extent to which this
7 might be undertaken.

8 From time to time a number of proposals have
9 been received from Steamship Owners, Brokers and
10 Operators whereby they proffer to perform the Company's
11 transportation of part, or all, of the traffic originating
12 at, or destined to, our various operations. In the
13 main, they contemplate in common -

- 14 1) Substituting their own operations for the
15 Company ship-owning activities;
- 16 2) Providing suitable vessel tonnages for
17 part, or all, of the water traffic at stipu-
18 lated rates.

19 The trend today is towards larger type bulk
20 carriers in order to take advantage of economies afforded
21 by the larger units in reduced cost of freighting. The
22 construction of larger vessels is a means to cut down
23 increased newbuilding costs as applied to the units of
24 freight carried. It is obvious, however, that if
25 Dominion Coal is to enter into the Great Lakes market,
26 a large self-unloader type vessel will be a necessity.

27 Today, limitations exist in relation to the
28 size of such vessels because of restricted drafts at a
29 number of ports that offer an outlet for Nova Scotia
30 coal. The movement to limited - draft ports would have
to be transhipped at Montreal to smaller vessels.



1 The Company's studies indicate also that
2 availability of suitable vessels under U.K. flag for
3 the coal trade have been diminishing.

4 In the considerations of a suitable type
5 vessel for the coal trade, cognizance has to be taken
6 also of the flow of coal from the mines to the piers in
7 relation to the most economical unit in order to avoid
8 delays and mesh with coal production. Delays to
9 vessels can cost money and the larger size units naturally
10 attract a larger demurrage cost. On the other hand,
11 improved dock facilities to accommodate larger vessels
12 involve capital expenditures which dictate long-term
13 coal outlets to justify any such undertaking.

14 THE CHAIRMAN: Do you mean by that individual
15 companies or...

16 MR. MATHESON: I am referring specifically
17 to the fact that Dominion Coal Company would have to
18 provide larger piers.

19 THE CHAIRMAN: Does the company undertake to
20 establish any facilities on the wharf?

21 MR. MATHESON: We have our own pier.

22 THE CHAIRMAN: I mean on the public wharves
23 along the Lakes.

24 MR. MATHESON: We have our own pier. It is
25 the National Harbour Board.

26 THE CHAIRMAN: At Montreal?

27 MR. MATHESON: Yes.

28 THE CHAIRMAN: What about smaller points along
29 Lake Ontario?
30



1 MR. MATHESON: We would be going to ports
2 of different companies that handle coal. Coal depots,
3 or industries.

4 MR. CHAIRMAN: There are no government
5 wharves along there?

6 MR. MATHESON: Not that I know of, Mr.
7 Commissioner. For example, in Toronto it would be
8 the piers of the Coal companies and so on. Different
9 coal companies.

10 THE CHAIRMAN: That is governed by the
11 Harbour Board?

12 MR. MATHESON: It would come under the
13 National Harbour Board's jurisdiction the same as
14 our facilities in Montreal.

15 What I was directly referring to here, as
16 well we would have to have in order to accommodate
17 a collier type vessel capable of carrying 20,000 tons
18 with a length of probably around 600 feet. There would
19 be required some capital expenditures on our loading
20 facilities in Sydney in order to accommodate a vessel
21 of that size.

22 Rail Services:

23 The Carroll Royal Commission in its discussion
24 of the proposed Canso Causeway said as follows: "The
25 physical limitations of the existing rail route have
26 not, apparently, restricted the distribution of Cape
27 Breton coal to market by railway." (*)

28 While the existing curvatures and gradients from
29 the Cape Breton area have a limiting effect on the train

30 (*) Pg. 354 - Report Royal Commission on Coal, 1946



1 consist and, consequently, result in an increased unit
2 cost of transportation, the opening of the causeway on
3 May 14, 1955 has resulted in a gradual improvement in
4 the elapsed train time and overcome a considerable
5 amount of difficulties that had previously been
6 experienced in the movement of coal and other products
7 from the Sydney area.

8 As of today, scheduled transit time for a
9 trainload of coal and steel from Sydney to Montreal
10 is 53 hours compared with 79 hours and 45 minutes before
11 the causeway was opened, -- 931 miles, sir -- that is
12 a betterment of 26 hours 45 minutes. While handicaps
13 still obtain in relation to the tonnage that can be
14 carried from Sydney to Moncton, New Brunswick, this
15 has been in part overcome by additional diesel units
16 per train but, relatively, the increased cost factor
17 still remains. The diesels operating out of Sydney
18 are classed as MR-16 and, under fair weather conditions,
19 one such unit can handle approximately 1500 tons from
20 Sydney to Havre Boucher, N.S.; 1300 tons from Havre
21 Boucher, N.S. to Truro, N.S.; 1650 tons from Truro,
22 N.S. to Moncton, N.B.; in contrast to 2100 tons from
23 Moncton, N.B. over the so-called Trans-Continental
24 segment of the C.N.R.

25 As a consequence of the improved railway
26 services, it has been possible to control, to a greater
27 degree, blocks of cars destined to consignees on a
28 basis more consistent with required arrivals.
29 Inclement weather, and other uncontrollable conditions,
30 do, however, make all-rail movements less controllable



1 for long hauls of 1000 miles, or more, than where
2 the distance from coal storage depots along the St.
3 Lawrence is only a matter of one hundred miles, or
4 less. The need for being in a position to supply
5 customers' demands on short notice from St. Lawrence
6 coal depots is discussed in another section of
7 this submission.

8 That, Mr. Chairman, completes my particular
9 section.

10 THE CHAIRMAN: Any questions? Thank you.

11 MR. FAIRLY: Mr. Commissioner, I would
12 like to ask Mr. Charles Appleton to give this section
13 of the submission on the part of marketing.

14 THE CHAIRMAN: Yes.

15 MR. CHARLES APPLETON: Mr. Commissioner,
16 the Nova Scotia Coal industry has suffered major
17 market dislocations in the past few years. Not only
18 has the total consumption varied up and down, but
19 individual markets have changed rapidly.

20 One of the most drastic shifts has been in
21 the railways, once one of coal's best customers.
22 After World War II the Canadian railways commenced
23 their dieselization program, replacing the old steam-
24 driven engines with the diesel locomotive.

25 In 1948, 12,421,672 net tons of coal were
26 purchased by the railways in Canada. By 1958 this
27 tonnage had dwindled to 1,393,823. Of the Bituminous
28 coal sold to the Canadian railways, this company
29 furnished 1,551,848 net tons in 1939 compared with
30 172,735 net tons in 1958.



1 This market is continually decreasing and
2 holds little hope for the future.

3 The past decade has seen a tremendous
4 increase in the demand for energy in Canada and a
5 corresponding increase in the production of competitive
6 fuels to meet the demand. Oil and natural gas
7 discoveries, together with hydro resources developed
8 (particularly in Quebec) have all participated in
9 this growth and have offered such severe competition,
10 that long standing coal markets have been lost.

11 For example, in 1950, coal supplied 53% of
12 the total energy market and in 1957 only 25%. Nova
13 Scotia coal, situated on the eastern seaboard, with
14 large potential markets in Quebec and Ontario, is
15 handicapped by difficult mining conditions and long
16 freight hauls in order to reach these markets.

17 Those are Dominion Coal Boards' figure.

18 THE CHAIRMAN: That is in Canada?

19 MR. APPLETON: Yes, sir.

20 THE CHAIRMAN: Those came, I suppose, from
21 Dominion statistics?

22 MR. APPLETON: Dominion Coal Board.

23 In addition to competing with various energy
24 sources, Nova Scotia coal must overcome the severe
25 competition of American coals available throughout this
26 area. The physical layout of American coal seams and
27 their proximity to the central Canada markets enable this
28 product to be marketed at prices far below any obtainable
29 on Nova Scotia coal without assistance from the Federal
30 Government.



This change in pattern is demonstrated in the following table taken from the Dominion Coal Board's Annual Report 1957 - 58.

Energy Sources by Percentage of Total

Year	Total all Coal and Coke	Hydro Electric Power	Natural Gas	Total Petroleum Fuels	
1950	53.0%	7.8%	4.1%	35.1%	100%
1951	48.8	8.1	4.3	38.8	
1952	44.9	8.6	4.7	41.8	
1953	40.4	8.7	5.5	45.4	
1954	34.8	9.5	6.5	49.2	
1955	31.6	9.1	7.3	51.9	
1956	29.3	8.3	7.6	54.8	
1957	25.4	8.4	9.8	56.4	

The corresponding tonnages for Canadian coal production and imported coals and coke show a decrease from 46,622,973 tons in 1950 to 33,393,107 tons in 1957. In 1959, tonnage dropped to approximately 24,000,000.

MARITIME AND NEWFOUNDLAND MARKETS:

One of the most desirable markets for Nova Scotia coal is in the Atlantic Provinces, and it has always been the policy of the Dominion Coal Company to maintain the highest possible sales volume in that area. Close contact is maintained with all coal consuming Industrial, Commercial, Federal and Provincial outlets, as well as the many dealers established throughout the territory. These dealers perform a valuable function in servicing the Domestic, Commercial and Institutional requirements.

In 1958 the Atlantic Provinces provided an outlet for approximately 2,175,000 tons of our coal.



1 Incidentally, there are 65 dealers that we have that
2 we deal through.

3 THE CHAIRMAN: Does that include your own
4 consumption?

5 MR. APPLETON: Yes, sir.

6 The balance of the market was supplied by
7 other operators in Nova Scotia and New Brunswick and
8 to a small extent by American coal. During that year
9 total sales in the area amounted to approximately
10 3,200,000.

11 If you would like to have the percentage,
12 I have it on the next sheet. In Nova Scotia we
13 have 83.8 per cent of the market; and in New Brunswick
14 35.6; in Newfoundland, 83.8. That was in 1958. And
15 in Prince Edward Island we have 75.6 of the market,
16 a total of 68.2 percent.

17 THE CHAIRMAN: That was in 1958?

18 MR. APPLETON: Those were the last official
19 figures I had from the Government.

20 THE CHAIRMAN: Does that take into account
21 Anthracite?

22 MR. APPLETON: No, sir.

23 MR. CHAIRMAN: Just bituminous?

24 MR. APPLETON: Yes. Incidentally, while we
25 are on coke, there was some question this morning,
26 we sold in 1958 20,624 tons of coke in the Atlantic
27 Provinces, about 15 to 18,000 tons in the Province of
28 Quebec; roughly close to 40,000 tons of coke.

29 Despite efforts to maintain and increase
30 sales of Nova Scotia coal within the Atlantic Provinces,



1 the inroads of residual oils and middle distillates
2 have eaten heavily into the market. The severity of
3 this becomes readily apparent when stated in terms of
4 annual coal tonnage displaced by oil fuel amounting
5 to approximately 1,000,000 tons in the Industrial,
6 Commercial, and Domestic fields. (*)

7 THE CHAIRMAN: That is in the Atlantic
8 Provinces?

9 MR. APPLETON: Yes, sir.

10 This figure does not include substantial tonnage lost
11 to the various railroads as a result of dieselization,
12 amounting to approximately 1,500,000 tons annually.
13 The inroads by oil in the Industrial and Heating
14 fields will gain further impetus on the completion of
15 another Eastern refinery located in Saint John, N.B.,
16 scheduled for production in the Fall of 1960. A large
17 paper mill is presently under construction in the
18 Mulgrave area of Nova Scotia and while every possible
19 effort has been made to have coal equipment installed,
20 foreign residual oil has captured this market. This
21 would have represented an outlet for approximately
22 100,000 tons of coal annually. The effect of fuel oil
23 consumption in the energy markets of the Maritimes and
24 Quebec is best illustrated by the increase from
25 3,138,096 barrels in 1945 to 14,719,688 barrels in 1957.
26 That represents 750,000 tons for the first figure, and
27 3,500,000 tons of coal for the second figure, that was
28 the increase.
29

30 (*) Appendix No. 32



1 A major difficulty in filling the domestic
2 coal needs of the Atlantic Provinces is due to a very
3 large proportion being required to satisfy winter heating
4 requirements which calls for prepared sizes to be
5 supplied in the five winter months. This places a heavy
6 burden on the mining operation, due to a sudden surge
7 in demand for prepared coals starting generally in
8 November through to March, when demand begins to taper
9 off again and causes considerable difficulties in
10 supply and gives rise to severe criticism from the trade.
11 If we had another washing plant at the Dominion site,
12 that would be alleviated, sir.

13 THE CHAIRMAN: Yes, I want to speak to you
14 about that later.

15 MR. APPLETON: Natural Gas does not pose any
16 competitive problem to Dominion Coal sales in the
17 Maritimes, nor will it in the foreseeable future.

18 The introduction of the New Beechwood Hydro-
19 Electric generating station has had the effect of
20 substantially reducing coal tonnage required in the
21 thermal power generating stations of New Brunswick
22 Electric Power Commission.

23 The utilization of oil as industrial fuel has
24 shown a steady increase since the War. (*) Atlantic
25 Provinces' consumption rose from 1,586,272 bbls. in
26 1950 to 3,723, 143 bbls. in 1958. That is an increase
27 of some 380,000 tons to 890,000 tons. While all of
28 this increase cannot be regarded as coal tonnage displaced,
29 the 150% increase in industrial oil usage in 8 years in a
30 relatively static economy gives evidence of the severe
competition that coal has experienced and unfortunately



1 largely displaces Slack coal which is the major portion
2 of our production.

3 In addition to oil fuels we must meet
4 competition from coals produced by other Maritime
5 operations, such as the Minto Coal Fields in New
6 Brunswick and the Independent Operations in Nova
7 Scotia. With regard to the competition faced by
8 Dominion coal from Minto coal, the following are the
9 major contributing factors. The Minto Fields are
10 able to produce their product at a lower cost due to
11 a major portion of their output coming from strip mining
12 operations as opposed to the more difficult and costly
13 submarine operations of Dominion Mines. Coupled with
14 this lower initial cost, Minto coal fields situated as
15 they are, enjoy more favourable freight rates to the
16 large Slack outlets in New Brunswick and Quebec. In
17 (*) Appendix No. 33

18 addition, New Brunswick coal receives subvention
19 assistance on rail coal delivered to subvention areas.
20 The result has been the loss of several accounts
21 amounting to approximately 100,000 tons of Slack coal
22 annually.

23 The Independent mines of Nova Scotia produce
24 approximately a half million tons of coal. The lower
25 costs of production, together with identical rail
26 subvention, has enabled them to capture approximately
27 60,000 tons of the Slack coal market from Dominion
28 Coal in 1959.

29 A large portion of the Newfoundland Domestic
30 coal market is supplied by Dominion Coal, however the



Utility, Industrial and Paper Companies' needs for fuel are filled by heavy oil. Gander and Torbay Airports' requirements, amounting to approximately 20,000 tons annually, are the only remaining outlets for industrial Slack coal in the Province at this time.

Competition offered by imported heavy oil delivered by tanker is, and has been over past years, such that it has been impossible for Slack coal to compete in this market. Approximately 250,000 tons of Slack coal have been displaced.

The following is a statement of Newfoundland shipments as reported by Dominion Bureau of Statistics of coal made available for consumption, 1953 to 1958 inclusive:

<u>Year</u>	<u>Received from other Provinces</u>	<u>Received from United States</u>
1953	210,483 (209,670 Dosco)	57,428
1954	195,611 (195,000 ")	63,299
1955	177,565 (176,212 ")	84,248
1956	184,138 (179,346 ")	81,076
1957	184,785 (180,719 ")	53,704
1958	156,186 (152,589 ")	20,515

<u>Year</u>	<u>Received from Great Britain</u>	<u>Total</u>
1953	3,022	270,933
1954	8,260	267,170
1955	-	261,813
1956	-	265,214
1957	-	238,489
1958	-	176,701



1 In 1959 a total of 181,071 tons of our coals were
2 supplied.

3 The Domestic market is vulnerable to oil
4 due to its convenience and, using the rest of Canada
5 as a guide, it can be expected that coal consumption
6 will gradually decline as economic conditions further
7 improve throughout the Province.

8 According to Government statistics and our
9 knowledge of the market, the total consumption of
10 Bituminous coal in the Province of Quebec in 1958
11 was approximately 3,030,000 net tons. The Dominion
12 Coal Company supplied 1,641,000 tons and the remaining
13 1,389,000 tons were made up of imports from the U.S.A.,...

14 THE CHAIRMAN: Nothing from England?

15 MR. APPLETON: No sir.

16 THE CHAIRMAN: They used to bring in
17 considerable.

18 MR. APPLETON: There was for quite a while,
19 but since before the war there has not been anything to
20 speak of. ... other Nova Scotia and New Brunswick
21 mines. Some 1,153,000 tons of this remainder was not
22 available to Dominion Coal due to the special coal
23 characteristics required (e.g. low sulphur metallurgical
24 coal, high fusion coal to meet special demands and special
25 industrial and domestic preparations). Of the remaining
26 236,000 tons, the independent operators in Nova Scotia
27 and New Brunswick supplied 156,000. The 80,000 tons
28 remaining is American coal.

29 During the War years and for several years
30



1 thereafter, the Dominion Coal Company imported and
2 sold American coal in Quebec. This was done partly
3 in an effort to serve long standing customers and
4 partly to maintain a market for Nova Scotia coal when
5 it once more became available for this area. The
6 supply of Nova Scotia coal is now such that the
7 importation of the American product has been discontinued
8 so that most of the customers maintained by this practice
9 are available as outlets for our Nova Scotia product.
10 While American coal was being handled by the Dominion
11 Coal Company, many new accounts were obtained,
12 unfortunately some of these are not available to Nova
13 Scotia coal, as their equipment is such that the
14 characteristics of our coal do not provide satisfactory
15 operation. However, all accounts that can use Nova Scotia
16 coal have been switched over and some new outlets, formerly
17 purchasing American coal through other suppliers, have
18 also been captured. That is what we are trying to
19 displace now.

20 The coal market in Quebec is subject at all
21 times to competition from imported American coal. Their
22 wide range of characteristics and uniform preparations
23 are very attractive selling points, and American prices
24 are the ones that Nova Scotia coal must meet, not vice
25 versa. Great care and attention must be exercised
26 with every account to assure that business is maintained
27 for Nova Scotia coal.

28 Coals from independent mines in the Maritimes,
29 with their lower operating costs and equivalent subventions,
30



1 also compete for a share of the Quebec market.

2 Under present conditions the importation of
3 overseas coal is not economic and therefore, at present,
4 poses no problem. The cost per ton of American coal
5 is by far the lowest throughout the free World, and it
6 is this source that supplies the competition in solid
7 fuel for the Canadian coal industry. This condition
8 will not alter in the foreseeable future.

9 Imported oil from South America and other
10 world sources, delivered either by tanker to St.
11 Lawrence ports or by pipeline from Portland, Maine,
12 to Montreal, have been and will continue to be one
13 of the severest competitors for the Quebec fuel market.
14 The amount of oil consumed in industry has increased
15 enormously since the War, when it became available in
16 volume. The huge market in new construction contributed
17 to this increase, but along with this were numerous
18 conversions from coal to oil firing (*). Primarily,
19 the large consumers converted were those situated on
20 deep water, where tankers could come alongside and discharge
21 their cargoes direct to customers' storage. During the
22 last few years, however, prices quoted by oil companies
23 on Bunker "C" deliveries by truck or rail to inland
24 consumers have been below even the lowest prices
25 available on American coals, and are completely out of
26 range of Nova Scotia coal under present subventions.

27 (*) Appendix 32

28 The tonnage lost, due to major consumers converting from
29 coal to oil over the past several years, amounts to
30



1 approximately 1,000,000 tons. (*) The refinery
2 capacity at Montreal has increased enormously and two
3 new refineries have been erected in recent years.
4 The subventions make us competitive with American coal,
5 but not with oil.

6 The impact of natural gas is just being felt
7 in the Quebec market. Initially it concentrated on the
8 Montreal domestic trade, which never formed a substantial
9 portion of the bituminous coal outlets. With this
10 consolidated, they are now turning to the industrial
11 users of the province. Another threat for the existing
12 coal market is the proposed pipeline for natural gas
13 which is also invading the industrial area of Three
14 Rivers and Shawinigan. Recently a large apartment
15 development in St. Laurent, a Montreal suburb, converted
16 to natural gas. This was previously supplied with
17 approximately 7,000 tons of Nova Scotia coal annually.
18 A large Montreal sugar refinery has also converted from
19 Dominion coal; a loss of some 50,000 tons. Indications
20 were that a reduction of over \$2.00 per ton would have
21 been necessary to keep this account on coal. The coal
22 tonnage, actual or potential, lost or threatened by
23 natural gas amounts to approximately 400,000 tons. (**)
24 The main inducement used by natural gas to capture the
25 large industrial outlets has been a very attractive
26 initial selling price.

27 (*) Appendix No. 32 (**) Appendix No. 34

28 The province of Quebec has an abundant supply
29 of water power and the development of these resources
30



1 has been going forward at a rapid pace since the War.
2 Hydro-electric installations increased to a 1957
3 installed capacity of 6,383,093 kilowatts. I understand
4 it is now up to 9,000,000 kilowatts.

5 THE CHAIRMAN: Do you mean it has increased
6 from 6,383,000?

7 MR. APPLETON: In 1957 it was 6,383,093
8 kilowatts. That was the last record I was able to
9 find, but I have since read this in the paper a few
10 days ago that it was up to 9,000,000 kilowatts now.
11 I just happened to notice that in the paper. Since
12 1957, other Hydro resources have been or are in the
13 process of being developed. The station at Carillon,
14 on the Ottawa River, has a potential of 600,000 H.P.

15 Incidentally, 600,000 H.P. is about 600,000
16 tons of coal, close enough to say that is what it is.
17 The Lachine Rapids potential, when developed, is
18 estimated at 2,000,000 H.P. Developments on the
19 North Shore at Bersimis and Manicouagan are being
20 developed and enlarged. This indicates that surplus
21 power will continue to be one of coal's competitors
22 until the electrical energy demand approaches the
23 available supply. In spite of these developments, the
24 energy demand in specific areas of Quebec is expected
25 to require thermal electric stations to complement the
26 nearby hydro generation.

27 The electrical companies have been able to
28 anticipate the market demand by several years and this
29 policy usually results in a surplus of energy available
30 for use as secondary power by industry. In many



1 instances, this power is utilized in electric boilers
2 for steam raising purposes and is a direct replacement
3 of coal. In 1957 some 1,236,117,000 k.w.h. (equivalent
4 to 180,000 tons of coal) were used under electric boilers
5 in Quebec. The Dominion Bureau of Statistics reported
6 for the first seven months of 1959 some 3,022,139,000
7 k.w.h. (equivalent to 450,000 tons) were supplied to
8 electric boilers. This displaced mostly Dominion
9 coal. The selling price of this power is usually
10 determined by the cost of whatever fuel it is replacing.
11 During periods of normal business activity, this
12 secondary power is usually available only at night and
13 over weekends, when primary demands are low. This has
14 been a longstanding practice and the coal industry has
15 geared its operations accordingly. If the cost of
16 Dominion coal per thousand pounds was 40 cents, the
17 electric people would sell that for 30 or 35 cents.
18 If you put your costs down to 35, they put theirs
19 down to 30. They just keep putting it down. However,
20 in times of reduced business activity, this secondary
21 power is available for longer periods and the effect
22 on the coal industry, already contending with lower
23 demand generally, is disastrous. The cancellation of
24 coal tonnages during 1958, when a large portion of the
25 Saguenay and Lake St. John hydro-electric energy
26 output was released for distribution through the
27 Quebec grid, resulted in enormous coal stockpiles at
28 the various terminals along the St. Lawrence, customers'
29 yards, and at the pithead. As mentioned, the selling
30



1 price of this power is established by the cost of
2 producing steam by other methods and is usually below
3 the existing overall operating costs. Nova Scotia coal,
4 sold under subventions to enable it to compete with
5 American coal, has no alternative but to see this tonnage
6 displaced.

7 By 1959 some 450,000 tons of Nova Scotia coal
8 were displaced annually by this surplus hydro power in
9 the Saguenay and Three Rivers area. (*)

10 (*) Appendix No. 35

11 The advent of oil and natural gas for domestic
12 use have had their effect on the domestic market for
13 coke in Quebec. However, this change has not affected the
14 Nova Scotia coke producer as the domestic market has not
15 been supplied with Nova Scotia coke for many years, as we
16 are not competitive with the locally manufactured product.
17 In the industrial field, however, one large consumer
18 has been retained for surplus coke breeze from Sydney.

19 The completion of the St. Lawrence Seaway has,
20 in effect, given the Province of Quebec ocean shipping
21 from both east and west. This matter has been fully
22 dealt with under the part of this Brief dealing with
23 Transportation.

24
25
26
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1 The prospect for coal markets in Quebec
2 over the next few years is not encouraging. Oil,
3 natural gas and hydro will continue to make extensive
4 inroads into the present coal market. Competition
5 from American coal may become more severe, depending
6 on the effect of the Seaway on Transportation charges.

7 Despite this, the possibility for new
8 outlets in thermal electric plants could provide an
9 alternative to a diminishing industrial market. It
10 had been the belief that Quebec, with all its hydro
11 resources, would not require thermal generated
12 electricity for many years. It now appears, however,
13 that the industrial growth pattern would make it more
14 economical to install thermal plants close to the
15 consumption sites rather than transmit electric power
16 from distant hydro sources.

17 Two generating stations are talked of at
18 present, one in the Sorel area, is expected to be in
19 operation in the middle '60's, the other in the
20 Gaspe area is for completion at some future date.

21 The Sorel plant may ultimately provide an
22 outlet for two or three million tons of coal per year;
23 the Gaspe plant further substantial tonnage.

24 It is not a certainty that coal will be the
25 fuel utilized in these plants. Other sources of energy
26 will be investigated and in the ultimate analysis, the
27 cost of producing electric power by various means will
28 determine the fuel used. Here again, a subvention program
29 designed to make Nova Scotia coal competitive solely with
30



1 imported American coal might not enable the Canadian
2 product to compete with other fuel sources.

3 The existing and potential demand for energy
4 in Ontario provides the greatest market for bituminous
5 coal in Canada. The tonnages of American coal
6 imported over the past several years are in the
7 statement on the next page.

8
9 Bituminous Coal Imported into Ontario

10 <u>Year</u>	<u>Net Tons</u>
11 1952	17,225,131
12 1953	16,833,084
13 1954	13,457,489
14 1955	14,644,945
15 1956	17,596,854
16 1957	15,587,259
17 1958	10,610,651

18 Only a part of this 1958 tonnage, however,
19 was available as a potential market for Dominion Coal.
20 The Nova Scotia coal available for sale in volume is a
21 3/4" Slack coal, 3% sulphur content and approximately
22 2100° fusion temperature of ash. These characteristics
23 limit the potential market. From our information we
24 estimate that the steel industries in Ontario using low
25 sulphur washed coals consume approximately 4,300,000 tons.
26 The brick and other allied industries also demand a low
27 sulphur coal, this tonnage amounts to approximately 25,000
28 tons. The size factor is also an important consideration,
29 many industries having expanded to such an extent that
30 existing boiler plants can only operate on a double
screened preparation, or the design of the plant demands
the use of a higher fusion coal than Dominion. From
information gathered by our sales survey calls, this



1 demand should amount to 1,000,000 tons. Coal for
2 railway use, though diminishing, is still a factor.
3 Here again, a double screened coal is necessary and this
4 amounts to some 650,000 tons a year. Remember I am
5 speaking of 1958. However, we do not have this size
6 of coal to supply. Incidentally, while I am here,
7 we have all these lists and all these names of people
8 we called on, the tonnage they use whether it is low
9 sulphur coal or whether it is high fusion or whether it
10 is some other reason, as to why we didn't get the
11 business. The domestic, commercial and light industrial
12 coals in use in the province are largely free burning,
13 high fusion stoker coals and here again the Nova Scotia
14 coal available does not suit the requirements.
15 Approximately 1,390,000 tons are consumed annually by
16 this group. A further 520,000 tons were shipped to
17 the head of the lakes, beyond the reach of Nova Scotia
18 coal. Nova Scotia coal is not competitive. 1,161,000
19 tons were imported into Western Ontario, beyond Woodstock,
20 where Nova Scotia is not competitive in price under
21 present subvention. Long term contracts and imports
22 of high fusion special coal for Quebec destinations
23 total a further 180,000 tons.

24 There is one contract of 120,000 tons that
25 was signed on a five year basis for American coal
26 and there was 60,000 tons that came in through Prescott
27 but showed as a sale in Ontario, as an entry in Ontario.
28 The destination was Quebec. It was entered in the Ontario
29 description.
30



1 In 1958 the remaining tonnage of 1,367,000
2 tons was the market for which Nova Scotia coal is suited,
3 consisting mainly of large industrial users, equipped
4 with pulverized fuel burning equipment. Here again
5 the severest competition is encountered. The ability
6 of the equipment to handle lower grades of coal and
7 the large tonnages involved, attract the keenest bidding
8 from American suppliers.

9 Despite these difficulties, the Dominion Coal
10 Company expects to sell some 750,000 tons of coal in
11 the 1959/60 season in the market as far as Woodstock in
12 the area where subvention has made us competitive. The
13 new subvention rates established April 23, 1959 reopened
14 the door for Nova Scotia coal in this market.

15 The Province of Ontario, lying just north of the
16 large Pennsylvania, Ohio and West Virginia coal fields,
17 has always provided a ready market for these imported
18 coals. The coal users of Ontario have developed their
19 handling facilities to suit this source of supply. For
20 the most part industrial coal users and suppliers have
21 located along the shores of the Great Lakes and coal
22 deliveries can be made from American ports to Canadian
23 depots with the least possible delay. With few
24 exceptions, these depots have no unloading equipment,
25 and deliveries must be made in self-unloading vessels.
26 The very short water distances covered in most of these
27 movements, the rapid loading at American ports and
28 unloading rate governed by the vessel itself, result
29 in low transportation costs.
30



1 The low transportation costs, due to Ontario's
2 position, and the low production costs available on
3 American coal provide Nova Scotia coal with very
4 severe competition. For example, Pennsylvania
5 coal of equal B.T.U. value with Nova Scotia coal,
6 can be landed F.O.B. dock, Toronto, for \$8.25 per
7 net ton. The cost of Dominion coal, without any
8 assistance from subventions, would be approximately
9 \$15.83 per net ton.

10 In addition, the great variety of American
11 coals, particularly in their fusion and sulphur
12 characteristics, have resulted in boiler designs
13 that will not operate with equal efficiency on Nova
14 Scotia coal.

15 American bituminous coal imported into Canada
16 is subject to a duty of 50¢ per net ton. However, in
17 the coke producing plants of the steel industry and in
18 certain industries where the finished product is exported
19 to the United States and in synthetic rubber industries,
20 the bituminous coal used is subject to a drawback which,
21 in effect, cancels the duty imposed.

22 The freight rates, coal characteristics and
23 costs, tariffs and exchange applicable on American
24 coal, coupled with the existing dock facilities form
25 some of the problems encountered in marketing Nova
26 Scotia coal in the industrial area of Ontario.

27 In the past, oil's share of the industrial
28 Ontario market was determined by its ability to compete
29 pricewise with American coal. The low cost of American
30



coal and the proportionately large transportation charges on oil combined, made coal the principal choice of most major consumers.

Recent developments, however, may disrupt this pattern. The Seaway now opens Ontario to foreign oil suppliers throughout the World on a direct shipment basis. The western Canadian oil fields, with their pipeline outlets to Ontario, now have lower transportation costs available to destination.

The huge demand for aviation and motor vehicle fuels has resulted in corresponding increases in Ontario's refining capacities. The production of aviation or motor vehicle gasoline, yields at the same time a large quantity of fuel oil.

A breakdown of the refinery yield for Canada in 1958 is as follows. These are Government figures. If you look at the lower section it shows that 46%, 27.5 and 18.7, 46.2% is distillate and light fuel and residual oil.

Gasoline	36.03 %	by volume
Kerosene	5.25 %	
Distillate & Light Fuel		
Oil	27.31 %	
Residual Oil	17.41 %	
Other Products	<u>14.00 %</u>	
	<u>100.00 %</u>	

For Eastern Canada:

Gasoline	32.84 %	by volume
Kerosene	6.14 %	
Distillate & Light Fuel		
Oil	27.45 %	
Residual Oil	18.72 %	
Other Products	<u>14.85 %</u>	
	<u>100.00 %</u>	



1 From the above, a refinery run through yields
2 in Eastern Canada 32.8% gasoline and, at the same time,
3 46.2% light and heavy fuel oil by volume. When the
4 relative densities of these products are taken into
5 account, it shows that for every ton of gasoline produced
6 there is approximately 1.75 tons of fuel oil available.

7 The demand for aviation and motor fuel is
8 expected to maintain its rate of growth for years to
9 come. The consequent increase of fuel oils produced,
10 coupled with the probably lower crude oil prices, due
11 to improved transportation, will undoubtedly increase
12 the competition to be expected from oil in Ontario.

13 One of the interests of the refineries will be to
14 avoid large inventories of this fuel and it can be
15 expected that prices will be such as to ensure this
16 result.

17 The completion of the natural gas pipeline
18 into Ontario has made this fuel available to many
19 industrial coal users. The principal conversions to
20 date have been from coal users previously supplied with
21 American coal, and as such, have not affected Nova
22 Scotia coal sales, except by reducing its potential
23 market.

24 At the moment, natural gas is threatening
25 Nova Scotia coal markets in the Ottawa and St. Lawrence
26 River Valleys, and some of Nova Scotia's bituminous
27 coal markets are being lost to natural gas this year.
28 Along the St. Lawrence River at Cardinal and Maitland,
29 two major users of bituminous coal (120,000 tons),
30 have already converted to gas-firing.



1 The prices quoted on natural gas to major
2 outlets, such as paper mills and cement plants, have
3 been well below the prices obtainable on competitive
4 American coal. As already stated, these American com-
5 petitive prices are the basis used in calculating the
6 subvention payable on Nova Scotia coal.

7 The practice of the natural gas companies would
8 appear to be one of capturing major outlets at prices
9 below those obtainable on coal and oil. The market
10 disruption caused by this practice, puts coal in the
11 role of a secondary supplier, whose tonnage is dependent
12 on the interruptions experienced in the gas supply. It
13 is impossible to gear the undersea operations in Nova
14 Scotia mines to this type of unpredictable market, which
15 depends on so many variables. The problems involved in
16 mining, transporting and stockpiling bulk materials such
17 as coal will not permit economical operations based on the
18 day to day requirements as secondary supplier.

19 Ontario's electrical power requirements
20 have grown so tremendously in the past decade that they
21 have surpassed the available hydro sources. This has
22 altered electric power's role from that of a competitor
23 to one in which it may prove to be an important customer
24 of the Canadian bituminous coal industry.

25 At the present time, two coal fired generating
26 stations are in operation, one at Toronto and another
27 at Windsor, and between them they provide a market for
28 approximately 1,500,000 tons of coal annually. Recent
29
30



1 Hydro development at Niagara Falls and on the
2 St. Lawrence Seaway, are generally satisfying the
3 electric power demand; this has reduced the quantity
4 of thermal electricity required to be produced and
5 the resulting coal inventories at these plants will
6 eliminate coal purchases this year. Not buying any
7 coal this year. It is expected that within a few
8 years the total electrical demand will have absorbed
9 the latest hydro power and the thermal stations will
10 again be in the market for coal.

11 In addition to the present thermal plants,
12 two others are planned, one at Lakeview just west
13 of Toronto, the other at Fort William. Construction
14 has started at both and the Lakeview station, with
15 a final potential of some 5,000,000 tons, will start
16 operating in 1962.

17 The total consumption of Ontario's thermal
18 electric stations, in terms of coal, is forecast at
19 26,500,000 tons by 1980. Those are the Ontario Hydro's
20 own figures.

21 Boiler equipment, installed in these plants,
22 is designed to handle coals having the same inherent
23 characteristics as those of Nova Scotia coal. As
24 proof of this, a 10,000 ton test was conducted on
25 Dominion coal at the Richard L'Hearn Station in the
26 fall of 1958 with satisfactory results.

27 The use of bituminous coal in these stations
28 is based on the present and projected cost of American
29 coal compared with costs of competitive fuels, and it
30



1 is this competition that Nova Scotia coal must meet
2 if it is to participate.

3 It is not beyond the realm of possibility
4 that competitive fuels will seek to capture these
5 markets, if they are able to offer their products at
6 prices which would assure their participation. Nova
7 Scotia coal, based as it is on competitive American
8 coal prices, could be excluded. We are only back up
9 to American coal, not oil or gas.

10 One of the attendant physical problems in
11 supplying these thermal plants is the method of
12 delivery, which has been dealt with in the Transportation
13 part of this Brief.

14 Our production of coke has always been
15 absorbed in the Maritime and Quebec markets and the
16 changing trends involving this fuel in Ontario have
17 no bearing on our product.

18 The St. Lawrence Seaway has opened Ontario's
19 ports to the oceans of the world. Their new
20 accessibility has not proved to be as advantageous
21 to Nova Scotia coal as is generally thought. The
22 majority of the coal docks in Ontario are designed to
23 be serviced by self-unloading vessels, so that even
24 though ocean colliers can reach the Great Lakes, in
25 most instances, it is impossible to unload them.
26 (See Transportation part of Brief.)

27 The present and future demand for coal by
28 Ontario's thermal electric stations provide the
29 greatest hope for the Nova Scotia coal industry. The
30



1 expected demand of some 26,500,000 tons by 1980
2 would far exceed the possible production in Nova
3 Scotia. Only a portion of this market would be
4 necessary to maintain steady employment. The coal
5 we have available has proven satisfactory for their
6 use and the expected stable requirements would
7 permit mining operations to be based on a solid
8 footing.

9 This demand for coal in volume may not
10 reach a substantial level for several years. This
11 interim period will be most trying for the coal
12 industry.

13 Interim markets must be available to keep
14 the mines operating. If these markets are not
15 maintained, the Nova Scotia coal industry will not,
16 in the future, have the capacity to participate in
17 an expanding Ontario thermal market.

18 There remains a market for bituminous coal
19 in the stationary power plants operated by the
20 railways. This will never approach the tonnage
21 formerly used as locomotive fuel, but does afford
22 a desirable outlet. It is unfortunate that, at the
23 present time, the size of coal required by the majority
24 of these installations is not available in sufficient
25 volume to permit our participation.

26 I would mention one only, and that is the
27 Union Station Power Plant in Toronto. It is a big
28
29
30



1 power plant and they have to have a nut coal in
2 that plant. We tried to get in there but we
3 couldn't get in.

4 Situated as they are, Nova Scotia mines
5 would appear to have a distinct advantage in the
6 European export market. For a time during the
7 last decade, it appeared that a large market could be
8 developed on a continuing basis and for the years
9 1955 and 1956 some 494,789 tons were exported with
10 subvention assistance.

11 Changing conditions in the world's oil
12 supply, increased production in European mines and
13 altered manufacturing techniques have all contributed
14 to reduce this export outlet. So much so that
15 European coal mines are now plagued with surpluses and
16 widespread down time at the collieries.

17 Exports were also made to South American
18 countries, from 1949 to '52 a total of 160,215 net
19 tons were shipped to Brazil. This market is no
20 longer available to us due to economic conditions.
21 I believe the American World Bank lends money and
22 one of the stipulations is they must buy coal from
23 the United States.

24 Attempts have been made to secure other
25 export markets. Quotations have been submitted on
26 coal for Korea and Japan, as examples, but purchases
27 were made mostly from other countries, whose coal
28 analyses were more suitable, with a small amount from
29 Western Canada.
30

1 It would appear that for the present, due to
2 world wide surpluses, the export market will offer little
3 relief to the problems of the Nova Scotia coal industry.
4 There is a choice of a wide variety of coals, the
5 majority of which, either through the intense mechaniza-
6 tion of mineable seams (as in U.S.A.) or through
7 cheaper labour costs, can be sold at prices below those
8 of Nova Scotia mines.

9 It may come about that the reductions in the
10 world export market will remain constant as importing
11 countries reduce their coal requirements and satisfy
12 a greater proportion of these requirements from the
13 increased European and Asian production.

14 Prior to World War II, some 300,0000 tons
15 of bunkering business was obtained yearly. This tonnage
16 rose steadily throughout the war years, due to the
17 huge convoys which took on supplies and fuel at Halifax.
18 The peak was reached in 1945 when some 800,000 tons of
19 bunker coal were supplied. With the return to peacetime
20 conditions and the increased use of oil-fired vessels,
21 the bunkering trade has declined steadily until finally,
22 in 1958, only 28,000 tons of coal were supplied.

23 There is no prospect for a revival of this
24 business. The coal-fired ships in use in world trade
25 are of advanced age and when scrapped will be replaced
26 by vessels that are oil-fired.

27 Since 1928 varying tonnages of Nova Scotia coal
28 have been moved to Domestic and Export markets, with
29 some form of Government assistance. (*) The original

30 (*) Appendix No. 36



1 Government Agency was the Dominion Fuel Board which
2 continued until the formation of the Dominion Coal
3 Board by Act of Parliament in 1947.

4 Since 1945, the competitive conditions,
5 under which Nova Scotia coal has been sold, have
6 increased in severity. American coals from Pennsylvania
7 and West Virginia have shown very little increase in
8 price at the mine during this period, and while American
9 freight rates have increased, they have been partially
10 offset by increases in rates on Canadian roads which
11 have cancelled whatever advantage Nova Scotia coal
12 might have had. The premium on Canadian funds has also
13 operated against Nova Scotia coal, for example, a West
14 Virginia coal costing \$4.00 F.O.B. mine, takes a \$3.56
15 freight rate to Lake Ontario, including unloading, making
16 a total of \$7.56, which is reduced by 30¢ a ton, using
17 an exchange rate of 4%. A similar situation exists
18 on all rail shipments to Canadian destinations.

19 Recently American railroads reduced their
20 rates on coal shipments to lakefront for furtherance
21 by water. These reductions vary from 6¢ to Lake
22 Ontario deliveries up to 37¢ on deliveries through Lake
23 Erie.

24 Without Federal subvention assistance to
25 offset these conditions, the Company's sales in the
26 central market would have been negligible.

27 At the present time, with the exception of
28 coal sold to the railways, no subvention payments are
29 made on deliveries of Nova Scotia coal east of Levis,
30



1 Quebec, and, were it not for this assistance, the
2 Atlantic Provinces would be the only market available
3 to Nova Scotia coal. With no subventions, the tonnage
4 of Dominion Coal sold would drop from approximately
5 4,300,000 tons this year to 2,200,000 tons. Such
6 reduction in coal sales would reduce activity at the
7 mines, with a resultant reduction in demand for motive
8 power, electric power, industrial and domestic, as well
9 as ship bunkering, to a point where a further reduction
10 of 125/150,000 tons could be expected.
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1 Under existing subventions and based on
2 present costs, the competitive market area for Nova
3 Scotia coal extends westward to approximately Woodstock,
4 Ontario. There are exceptions, particularly in the
5 waterfront areas, where deliveries of American
6 coal can be made direct by self-unloader vessels,
7 and where boiler equipment is suitable for burning
8 cheap strip mined coal.

9 The future of the coal industry is closely
10 allied with a stable market. It is impossible to
11 operate economically on a day to day basis. In this
12 regard, the possibility of approving subvention payments
13 to combat competition from other fuel sources should
14 be investigated. From past experience these fuels could
15 disappear from the market in time of crisis -- I am
16 speaking of oil -- and the cost of maintaining undersea
17 coal mines in a semi-ready operating condition is
18 prohibitive. To close an undersea mine for an
19 extended period, is to lose its production forever.
20 Even the home market of Nova Scotia coal, where
21 subventions are not applicable, has felt very seriously
22 the impact of foreign oil importations, and, as a result,
23 outlets for slack coal, the main component of the present
24 surpluses, have and continue to be lost.

25 Over the years market conditions have altered
26 the rates and the districts in which Nova Scotia coal
27 required assistance in order to compete with American
28 coal. (*)

29 (*) Appendix No. 36
30



Prior to World War II, subventions enabled Nova Scotia coal to compete in both Quebec and Ontario.

After the commencement of hostilities, there was an increased demand for coal in the Maritimes and for ship bunkering, and during the years 1942 to 1952 inclusive, the company was unable to serve the Ontario market.

After the war, markets in the Maritimes and Quebec absorbed our output and it was not until 1953 that outlets in Ontario could again be supplied in any volume.

Subventions by the Federal Government since 1928 have enabled the sale of some 45,000,000 tons of the Company's coal over the years that it has been in force. (*)

The present Government assistance available in Quebec and Ontario Provinces is summarized below and became effective April 23rd, 1959, under Order-in-Council No. P. C. 1959-509.

QUEBEC:

Up to \$4.50 on water movement to Quebec Ports.

Up to \$2.75 on movement inland from Ports.

35% of the freight rate on all rail shipments to Quebec City and Saguenay areas.

55% of the freight rate on all rail shipments to other areas of Quebec, except:

70% of the freight rate on all rail shipments to the five western counties of Quebec bounding the Ottawa River.

No subvention in the area east of Levis, excepting on railway coal.

(*) Appendix No. 11



Generally these rates provide adequate assistance to make Nova Scotia coal competitive with American coal. They provide no relief, however, from the competition offered by other sources of energy. Nova Scotia coal must be sold in competition with imported American coal and, as a guide, the Dominion Coal Board supplies monthly competitive figures on American importations.

ONTARIO:

On coal shipped ex Sydney by water to Montreal for furtherance to Ontario:

\$3.25 per net ton minimum guaranteed
\$4.50 per net ton maximum

On coal transhipped from Montreal to Ontario:

up to \$4.50 per net ton maximum with
a total overall maximum of \$7.75 per
net ton. That takes us to Woodstock.

On coal shipped all rail from Nova Scotia to Ontario destinations:

70% of the freight rate - maximum \$5.00.

These subvention rates permit Nova Scotia coal to compete industrially westward to a North and South line drawn at approximately Woodstock, Ontario.

Federal Government business has been obtained as far west as Fort William. However, this is due to the 20% preference on Canadian coals permitted at Federal Government establishments

As mentioned before, however, the characteristics of our coal and the size available in volume restricts our sales mainly to large pulverizer equipped plants.



1 In addition, the Nova Scotia Coal industry
2 has received valuable assistance at all times from
3 the Nova Scotia Government. Direct financial aid
4 and the additional Government grants available to
5 schools that decide to install coal-fired equipment
6 are only two examples. Furthermore, the Government,
7 knowing both the importance and the problems of the
8 coal industry, has seized every opportunity to
9 present the coal industry's case to the public and
10 to the Councils of Canada.

11 At the present time our Nova Scotia coal is
12 distributed in a variety of ways, each of which best
13 suits the particular consumer involved.

14 The Newfoundland trade is served by coastal
15 vessels from our loading piers at Sydney and North
16 Sydney.

17 The Nova Scotia, New Brunswick and Prince
18 Edward Island markets are served by truck in those
19 areas close to the mining districts, and by railway
20 direct to the customer's premises or to the dealer's
21 yard for the more distant points.

22 The Quebec market is served several ways,
23 depending on the customer's requirements. In some
24 cases shipments are made direct to customer by rail,
25 or by ocean bunker--"bulker" that should be. It is
26 not "bunker". In others, the coal is first shipped
27 by water to our dock facilities for storage, further
28 preparation and final delivery to customer by truck
29 or railway car.
30



1 In Ontario some customers are served
2 directly by rail from Sydney, others by rail ex
3 Montreal. In addition, coal is transhipped at
4 Montreal from ocean vessels to self-unloading or
5 bunker-type lake vessels -- that should be "bulker-
6 type". That is not "bunker" -- for furtherance to
7 customers served by water or others who must be
8 served by truck from local docks.

9 The method used for any particular delivery
10 is determined by the customer's handling and storage
11 facilities.

12 From time to time, the question of serving
13 Quebec and Ontario customers on a direct from mine
14 rail basis has arisen. One of the main reasons for
15 this is the obvious cheaper costs which would result
16 from eliminating the over dock charges. On the surface
17 this would appear to be one method of helping Nova
18 Scotia coal's competitive position in these markets.
19 In practice, however, it has a limited application
20 as there are many customers who cannot handle coal
21 in car lots, their facilities demand truck delivery,
22 or their storage facilities are limited to part car
23 tonnages.

24 Other customers cannot or will not rely on
25 a source of supply some 1,200 to 1,500 miles distant.
26 They have become accustomed to the reliability and
27 simplicity of having their fuel requirements stored
28 on docks within short truck or rail hauls and if
29 Nova Scotia coal cannot provide this service, they
30



1 will purchase from our competitors.

2 In addition to the most important consider-
3 ation of customer acceptance, there is the purely
4 physical problem of handling an all rail movement
5 of this magnitude. The vicissitudes of a Canadian
6 winter are well known, their effect on a long distance
7 rail movement in open top cars can be calamitous.
8 Frozen coal, late arrival and the attendant unloading
9 problems have proven the need for alternate, nearby
10 sources of supply. Our docks at Quebec, Three Rivers,
11 and Montreal were developed to this end, and time and
12 again their presence has enabled the Company to win
13 and hold markets for Nova Scotia coal.

14 Coal-fired Gas Turbine

15 In 1949 the Department of Mechanical
16 Engineering, McGill University, Montreal, initiated
17 a Research Project to burn coal in gas turbine engines
18 using the exhaust-heat cycle.

19 This program, undertaken by McGill University
20 under a contract with the Federal Department of Mines
21 and Technical Surveys and considerable financial
22 assistance from our Company, consisted in the design
23 and construction of an experimental unit in the
24 University's Gas Dynamics Laboratory in Ste. Anne
25 de Bellevue.

26 The most important application of this
27 machine for Nova Scotia coals appeared to be for
28 installation in a locomotive which would be cheaper
29 to operate than the diesel engine and thus retain an
30



1 important market for the fuel.

2 Unfortunately, after some nine years of work,
3 the project was abandoned due to the fact that no
4 solution could be found for some of the problems
5 encountered with burning coal especially with the
6 corrosion experienced in the heat exchanger tubes.

7 Stationary Coal-burning Equipment

8 Our Nova Scotia coals combine high coking
9 and low ash fusion temperature characteristics which
10 necessitate certain design features and certain
11 specifications in the burning equipment, if it is to
12 be at all efficient.

13 It is well recognized in Canada, and
14 especially in the Central Market area, the boiler and
15 stoker equipment in use, although manufactured in this
16 country, has been designed originally in the United
17 States and for coals having different burning
18 characteristics.

19 This proved to be a serious limitation in
20 the use of our coal when we expanded our market in that
21 area. Our Company, with the Fuels Division, Department
22 of Mines and Technical Surveys, Ottawa, recently
23 embarked on a research program to supply the answer to
24 some of these problems. The Dominion Coal Company
25 shares the financial cost and has placed a combustion
26 engineer at the disposal of the Department.

27 Some experiments had been made by the Fuels
28 Division prior to the start of this program, notably at
29 the Central Heating Plant in Ottawa and D.V.A.'s Ste.
30 Anne's Hospital in Ste. Anne de Bellevue, Quebec.



Following is a list of the equipment studied
with Sydney coals:

<u>Stoker</u>	<u>Manufacturer</u>	<u>Plant</u>	<u>Location</u>
Spreader Stoker Travelling Grate	Foster Wheeler	Central Heating Plant	Ottawa
Spreader Stokers Travelling Grate	Babcock-Wilcox	Firestone Rubber Co.	Hamilton
Spreader Stokers Travelling Grate	Babcock-Wilcox	Canadian Cottons	Cornwall
Spreader Stokers Dump Grates	Foster Wheeler	Westminster Hospital	London
Spreader Stokers Oscillating Grates	Foster Wheeler	Dominion Steel & Coal	Etobicoke
Chain Grate	Babcock-Wilcox	Westminster Hospital	London
Chain Grate	Babcock-Wilcox	R.C.N. Shearwater	Halifax
Chain Grate	Babcock-Wilcox	Queen Mary Hospital	Montreal
Underfeed Type E. Stoker	Combustion Engineering	Ste. Anne's Hospital	Ste. Anne de Bellevue
Vibra-Grate Stoker	Affiliated Engineering	R.C.N. Shearwater	Halifax
Pulverized Firing	Babcock-Wilcox	R.L. Hearn Station	Toronto



1 These experiments have demonstrated the
2 types of equipment best suited to burn our coals.
3 At present a unit is being designed conducive to
4 the best use of our coal.

5 The result of the research work done so far
6 can best be summarized as follows:

7 (a) A list of coal burning equipment best
8 suited to the characteristics of our coal is available
9 to Consulting Engineers.

10 (b) Design specifications such as furnace
11 exit temperature, burning rates, grate opening,
12 etc., can be recommended.

13 (c) Stoker grate design and composition
14 can now be specified.

15 Coal Additive Research

16 In conjunction with the work done on
17 equipment design, research is being done to find an
18 additive which would have the following qualities:

19 (a) Would increase the ash fusion temperature
20 from 2050° F. to at least 2400° F.

21 (b) Which would be cheap and easily applied.

22 (c) Would adhere firmly to the coal fragments
23 and would not segregate during handling.

24 In this regard, a lot of experimentation
25 has been done in the United States, particularly on
26 Indiana and Illinois coal but, unfortunately, the
27 results obtained there could not be extrapolated and
28 they do not apply to our Nova Scotia coal.

29 Throughout the years, products have appeared
30



1 periodically on the market which claimed would
2 correct all the problems but no thorough scientific
3 studies were made. This project is well under way
4 now at the Fuels Division in Ottawa and bench test
5 procedures and actual clinkering test procedures have
6 been set up to assess the values of certain materials.
7 The work has now reached the stage of routine laboratory
8 experiments necessary to collect the required data
9 and it is hoped that an answer will be found soon.
10 If an additive is found, this will certainly offer our
11 coals a market which has been closed to us because
12 of the limitations imposed by the burning equipment
13 installed.

14 Road Paving

15 The Curtiss-Wright Corporation in the
16 United States announced early in 1959 that it had
17 developed a road binder using coal tar and coal.

18 A pilot plant has since been built in the
19 State of Kentucky and approximately 12 miles of road
20 have been paved using this binder.

21 Following negotiations with the Canadian
22 branch of Curtiss-Wright, a serious investigation was
23 undertaken by ourselves and samples of coal tar and
24 coal have been sent to the U.S. for preliminary testing.

25 Briquetting

26 Because we are often penalized for failure
27 to meet the Canadian Government Size Specifications
28 when coal is supplied to various Federal Government
29 Agencies, another investigation was started with the
30



1 Department of Mines to determine the possibility of
2 briquetting the coal fines. This study was undertaken
3 in two ways:

4 (a) Binderless briquetting

5 (b) Briquetting with a binder

6 To date, these tests have not been proven
7 economically successful, but experiments are
8 continuing.

9 Coal Pak Unit

10 Samples of coal were sent to the Bituminous
11 Coal Research Institute in the United States to
12 experiment with this automatic coal burning unit.

13 THE CHAIRMAN: You say "United States. It
14 doesn't say United States.

15 MR. APPLETON: I just mentioned it; it is
16 in the United States. We all pay into that. We are
17 all members of that. We pay so much into that.

18 One of our engineers was present during the
19 test and the results were that a double screened
20 preparation of coal was found necessary for satisfactory
21 performance.

22 The Matheson Co. of New Glasgow has shown
23 interest in this unit and they propose to build a
24 unit in Nova Scotia for further experiments with our
25 coals.

26 THE CHAIRMAN: Just what is it?

27 MR. APPLETON: It is a type of automatic
28 coal burner.

29 THE CHAIRMAN: What do you mean by "automatic"?
30



1 MR. APPLETON: Well, you feed coal in and
2 the coal flows down gradually onto the grates.

3 THE CHAIRMAN: Automatic stoker?

4 MR. APPLETON: No, it isn't like that. The
5 coal has to be fed into it. It is not like an automatic
6 stoker.

7 THE CHAIRMAN: Is it fed into it, I understood
8 from you, by gravity.

9 MR. APPLETON: Yes.

10 THE CHAIRMAN: What is the difference as long
11 as you get it in?

12 MR. APPLETON: It is a special type of grate
13 it has. Personally I haven't seen it myself.

14 It has been the policy of the Dominion Coal
15 Company to promote the sale of its products by a
16 variety of means. Direct and close contact with its
17 customers will continue to be the main approach to
18 maintaining and increasing markets. In conjunction
19 with this, a combustion engineering service is
20 available to all customers, free of charge, to assist
21 them in resolving any difficulties that may arise.

22 The Coal Sales Department is made up of
23 20 persons actively engaged in coal sales in their
24 respective districts from Newfoundland to Ontario
25 All are competently trained to provide information
26 and assistance to customers on any problems
27 concerning coal and its merits as compared with
28 competitive fuels.

29 In a similar manner, contact is maintained
30 with Architects, Consulting Engineers, and others



1 involved in new construction and boiler room renovation,
2 to acquaint them with the latest available information
3 on coal-fired equipment and to obtain their assistance
4 in recommending its use on current or proposed projects.

5 Another of the Dominion Coal Company's market
6 promotion aids is a mailing service whereby consumers
7 are kept informed about the latest advances in coal
8 usage for their own particular requirements. Pamphlets,
9 brochures, extracts from tests, etc., are distributed
10 regularly to Industry, School Boards, Dealers, Architects,
11 and the like, to keep them informed of the latest in
12 coal equipment, and also to dispel some of the miscon-
13 ceptions about solid fuel utilization.

14 For the past decade or so, the shadow of
15 nuclear energy has stretched across the land. One
16 segment, its military potential, has altered the
17 social and military thinking of our age; the other,
18 its peaceful use, has yet to prove its potential in
19 practice.

20 It is this second, untried phase that may
21 affect the coal industry's future linked as it is with
22 the electrical demand of the country through thermal
23 generating stations. At present there are many
24 estimates of the cost of nuclear produced electricity,
25 some show a favourable comparison with thermal plants,
26 others predict this state will be reached in 10, 15
27 or 20 years. In any event, nuclear fired stations are
28 being built around the world and it is rumoured that
29 Canada is to start a 200,000 kilowatt station.
30



1 The cost of such a station would be
2 approximately 60 million dollars; whereas, a coal-
3 fired station of comparable capacity, based on
4 present cost data, could be erected for approximately
5 one-half, or 30 million dollars. It is also reported
6 that the cost of producing electricity, even
7 disregarding capital costs, is cheaper with a
8 conventional thermal plant or hydro plant.

9 The role of nuclear energy in smaller
10 power plants is still more speculative. The initial
11 capital costs would undoubtedly provide a greater obstacle
12 for private industry than for government backed projects,
13 but smaller plants are in operation in nuclear submarines,
14 freighters and ice breakers. The experience to be
15 gained from them could give rise in the future to
16 stationary power plants suitable for industry generally.

17 It may be concluded, therefore, that while
18 nuclear energy may pose a threat to potential coal
19 markets, its main role could be that of complementing
20 other fuels in satisfying our rapidly expanding
21 energy requirement.
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1 THE CHAIRMAN: Is that all?

2 MR. APPLETON: Yes.

3 THE CHAIRMAN: I have some questions I
4 want to ask you. Do you agree that the first necessity
5 of the Company would be to dominate the American market
6 more or less?

7 MR. APPLETON: Yes, I think the Company should
8 dominate it.

9 THE CHAIRMAN: Just what have you done to
10 maintain and expand your markets in these provinces?

11 MR. APPLETON: We have followed every customer,
12 all customers.

13 THE CHAIRMAN: How many men have you?

14 MR. APPLETON: I think about seven in the
15 Maritimes.

16 THE CHAIRMAN: Where are they centred?

17 MR. APPLETON: There are two in Sydney. They
18 take care of Newfoundland and Cape Breton Island. There
19 is one at the Acadian Coal Company in Stellarton, and
20 another one in Truro, two in Halifax and one in Kentville.

21 THE CHAIRMAN: What is the price of oil in
22 Halifax in small industries or commercial establishments?

23 MR. APPLETON: It is about eleven or twelve
24 cents a gallon, if I remember rightly.

25 THE CHAIRMAN: For business building purposes?

26 MR. APPLETON: Yes.

27 THE CHAIRMAN: Fuel oil?

28 MR. APPLETON: Yes sir.

29 THE CHAIRMAN: At that rate of eleven or
0



1 twelve cents, is coal competitive?

2 MR. APPLETON: Coal would not be competitive
3 at that rate. Coal sells for about twenty dollars
4 a ton.

5 THE CHAIRMAN: Would that be the price to
6 the Nova Scotia Light & Power Company?

7 MR. APPLETON: No, the price to them -- I
8 am speaking of domestic coal.

9 THE CHAIRMAN: Take the coal for business
10 buildings, a theatre, for instance.

11 MR. APPLETON: Coal for a theatre would be
12 twelve or thirteen dollars a ton delivered.

13 THE CHAIRMAN: Take twelve cents a gallon,
14 six gallons would be seventy-two cents. What would you
15 multiply that by to get the equivalent of a ton of
16 coal?

17 MR. APPLETON: It takes about one hundred
18 and forty gallons of oil to meet a ton of coal.

19 THE CHAIRMAN: That would be sixteen or
20 seventeen dollars, wouldn't it?

21 MR. APPLETON: Yes, it would be about
22 sixteen or seventeen dollars.

23 THE CHAIRMAN: If you sell it at twelve or
24 thirteen dollars, you have a competitive advantage.

25 MR. APPLETON: Yes, we are about equal with
26 oil. Would you let me look up my figures, please?

27 THE CHAIRMAN: Yes, certainly.

28 MR. APPLETON: Yes, prices at Halifax run
29 sixteen dollars to sixteen dollars and fifty cents.
30



1 THE CHAIRMAN: What would that represent?

2 MR. APPLETON: Coal for an apartment building
3 or for --

4 MR. BUCKINGHAM: That price of fifteen dollars
5 and forty-seven cents is at the dock at Halifax. There
6 would be truckage involved to get it to the consumer.

7 THE CHAIRMAN: I understand that there is
8 twenty-five per cent benefit by using coal in a building
9 of that sort in Halifax over the cost of coal.

10 MR. BUCKINGHAM: The cost of oil is about
11 sixteen dollars to the consumer. It would have an
12 advantage at the dock.

13 THE CHAIRMAN: At fifteen dollars for what?

14 MR. BUCKINGHAM: Fifteen dollars and forty-
15 seven cents at the dock.

16 THE CHAIRMAN: That represents how much ore?

17 I have no objection if you want to
18 examine that question and let me have the information
19 later. I want to know what oil is selling for at
20 Halifax and how you stand in relation to oil competition.
21 It may be my information is not correct, but I would
22 just like to know, because I think it was intimated
23 that oil for that purpose was selling at certain places
24 at sixteen cents or seventeen cents a gallon.

25 MR. APPLETON: You are right. I was wrong
26 in that figure.

27 THE CHAIRMAN: I will not press it. You
28 consider it and we can get it later.

29 MR. FAIRIEY: We will get those figures
30



1 and furnish them to you. Do you have some other
2 questions?

3 THE CHAIRMAN: Yes. Mr. Appleton, sit
4 down if you wish. I was wondering whether the company
5 has adopted any practices such as the oil industry has
6 of giving bonuses in the form of a mechanical means
7 of using coal. Have you made any advances of that
8 sort?

9 MR. APPLETON: For coal for mechanical use
10 as against oil?

11 THE CHAIRMAN: Yes, that is to say have you
12 furnished anything along with the proposal to sell
13 coal or have you confined your efforts to advice and
14 information?

15 MR. APPLETON: No, we have endeavoured to
16 build a unit to compete for domestic trade, a coal-
17 fired stoker. We spent considerable time on that.

18 THE CHAIRMAN: I may be wrong, but my information
19 is that the oil companies have actually made certain
20 installations to induce the use of oil.

21 MR. APPLETON: No sir, we have not done
22 anything like that.

23 THE CHAIRMAN: Is that your information about
24 oil?

25 MR. APPLETON: Yes, certainly.

26 THE CHAIRMAN: But you have not followed that
27 in any respect?

28 MR. APPLETON: No, they make certain
29 installations, and they give long terms for them
30



1 to pay for those installations, and we have not done
2 anything like that. We attempted to make a coal
3 fired unit that would be competitive in small domestic
4 homes with oil, but it has been discontinued.

5 THE CHAIRMAN: I want to say that the
6 information that has been given to me, which may or
7 may not be correct, is that you are not covering the
8 local market here as you might. What do you say about
9 that generally?

10 MR. APPLETON: Well, sir, I feel that we
11 are covering.

12 THE CHAIRMAN: I do not say that would cure
13 all the ills of the coal business, but I think the
14 only thing to consider is that advantage should be
15 taken in all directions to help things out, and the
16 total advantage of these things might be substantial.

17 MR. APPLETON: For instance as I mentioned
18 in the report, we call on all coal boards and on any
19 place where members of various....

20 THE CHAIRMAN:: Do you attempt to negotiate
21 variations in price to meet special situations.

22 MR. APPLETON: Yes sir we do.

23 THE CHAIRMAN: You have not been very
24 successful, I do not think.

25 MR. APPLETON: No, oil has been quite a
26 competitor. We have not been very successful in
27 competing against oil, that is true .

28 THE CHAIRMAN: Take the domestic market,
29 you lose the domestic market and the Maritime provinces
30



1 entirely.

2 MR. APPLETON: We are losing it gradually,
3 yes, and I cannot see too much hope for holding
4 on to it against the competition we are up against.

5 THE CHAIRMAN: Have you, yourself, talked
6 to any dealers in the Maritimes?

7 MR. APPLETON: Yes.

8 THE CHAIRMAN: Where?

9 MR. APPLETON: In New Brunswick.

10 THE CHAIRMAN: Who have you talked to
11 in Moncton, for instance?

12 MR. APPLETON: I have not talked to anybody
13 in Moncton, but I have a representative there that
14 talks to them, and he goes around and calls on them.

15 THE CHAIRMAN: I have heard him spoken of
16 as well, and the complaint up there was that they
17 could not get the coal that they wanted and the
18 quality they wanted. That may be due to the time
19 of the year they made the demand and the company was
20 not able to supply them all. I quite see that, but
21 I must say there is a general criticism of the services
22 given to the purchaser, and the information I have
23 is that you can compete in Moncton with oil to a much
24 greater extent than you are doing. Have you heard
25 anything like that?

26 MR. APPLETON: No, we are pretty well
27 competitive in prices.

28 THE CHAIRMAN: That is what I mean.

29 MR. APPLETON: We are pretty well competitive
30



1 in prices all over the Maritimes, but the dealers
2 take the line of least resistance as a rule, and
3 if a customer says he wants to burn oil, they pretty
4 well go along with him.

5 THE CHAIRMAN: I agree with that, but I
6 have been told by a very responsible dealer in
7 Moncton that coal is cheaper than oil in that city
8 and that people are prepared to take it because of
9 its cheapness. If they are willing to pay more for
10 more convenience, they can only go to oil, but there
11 are a great many people who are prepared to do the
12 work themselves and get the cheaper price.

13 Has that feature been brought to your notice or
14 have you considered it at all?

15 MR. APPLETON: Yes. We make every effort
16 through the dealer that we can and, for instance,
17 through any institution that is about to turn to
18 oil, we go in and endeavour to have them stay on
19 coal and show them the competitive position of coal
20 against oil. Our salesmen and our representatives
21 do that all the time, all throughout New Brunswick,
22 too, and through Nova Scotia and Prince Edward Island.

23 THE CHAIRMAN: I am giving you the benefit
24 of some information that was given to me. You have made
25 one statement one way, and your general statement
26 is not as satisfactory as I would like to have it,
27 that is all. Have you ever considered making any
28 inducement such that the oil industry has?

29 MR. APPLETON: That is, long term payments
30 for equipment?



1 THE CHAIRMAN: I do not care what they
2 are, giving them a piece of apparatus or long
3 term payments or anything.

4 MR. APPLETON: No sir, we have never done
5 so.

6 THE CHAIRMAN: Why not? You may have a
7 good reason. What is it?

8 MR. APPLETON: It is the amount of money
9 involved.

10 THE CHAIRMAN: Wouldn't it be better to
11 sell a great deal of coal at less profit than none
12 at all?

13 M.R APPLETON: I suppose it would.

14 MR. FAIRLEY: May I speak generally on
15 that same subject for a few minutes?

16 THE CHAIRMAN: Yes.

17 MR. FAIRLEY: In the first place I would
18 like to say that history has proven in several
19 countries that even if you can sell coal cheaper for
20 domestic uses, people will go to oil and gas in many
21 cases.

22 THE CHAIRMAN: In many cases, yes.

23 MR. FAIRLEY: I have lived in Pittsburgh for
24 many years where coal is cheaper than gas or oil, and
25 nobody will purchase a coal-fired unit in a house
26 regardless of that fact. I disagree with that, but
27 nevertheless it is a fact of life which we must face
28 up to.

29 We are running into the same thing here.
30



1 We find that people, domestic users, prefer oil.

2 Admittedly oil is very simple to handle, it being
3 a liquid, and simply necessitates a tank being put
4 in with a truck coming up once a week or every two
5 weeks and putting oil into your tank in the basement.
6 It is simple, cheap and clean. It is not always
7 cheap, but it is clean, and many people want that
8 instead of coal for that reason.

9 So that we are losing some markets to oil.
10 In places where gas is available, we are losing
11 markets to gas as well for that reason.

12 We have not, as you quite properly point
13 out, gone along with the oil industry in supplying
14 particular pieces of equipment to people who build
15 homes in order to get them to burn coal. Maybe we
16 should have, but one problem has always been, of
17 course, with the Dominion Coal Company as long as
18 I have had anything to do with it, it has been in
19 tough shape financially, and they have not been in
20 a position to invest extremely large amounts of
21 money in a program of that type which is rather
22 difficult to administer.

23 It takes a big staff. You have a financial
24 arrangement, dealing with individuals, many with
25 questionable credit ratings, and you have to have
26 a big staff of people to handle the things.

27 We have not got into that. Maybe we should
28 have, as I say. I certainly would not be positive
29 that we have been right on it.
30



1 THE CHAIRMAN: I am not suggesting whether
2 you should or should not, but I was wondering what
3 the reason was.

4 MR. FAIRLEY: The main reason that has not
5 been done before, and the reason I have not considered
6 it since I have been here, is simply the problem of
7 administering a program of that size, where you are
8 dealing with thousands of individual householders.

9 The oil people have done an excellent job
10 on it, and are doing a good job.

11 We did , as you know, try to develop a
12 furnace, before my time here, to burn coal on a
13 more efficient basis which was called the Dosco
14 down draught furnace, which you have undoubtedly
15 heard of because it was a resounding failure..
16 You get some people using them still, and think they
17 are very good and they are using them today, but
18 many, many people did not like them and in many cases
19 they demanded we take them out and make some settlement
20 with them, which we have had to do.

21 These are some of the problems we have
22 run into in trying to continue this domestic coal
23 business. We do have a rather substantial market
24 in Nova Scotia, but we are running into the problem,
25 Mr. Chairman, even right here in Sydney where coal
26 is substantially cheaper than oil, where many people
27 building new houses are putting in oil.

28 THE CHAIRMAN: That seems to be the tendency
29 with new construction. That is what I hear.
30



1 MR. FAIRLEY: Yes sir, and in all these
2 cases we make an attempt to get them to put in coal
3 burning equipment, but I will be perfectly frank with
4 you, we have not been too successful.

5 These are some of the problems we have been
6 faced with. We do not claim we have been perfect in
7 it. Maybe we have not done some of the things that
8 in hind sight we should have done, perhaps, but as
9 we moved along we have done what seemed to be best at
10 the time. Even today, I would be very hesitant, I
11 think, to move into a major program of agreeing to
12 supply people with individual pieces of equipment for
13 homes where they might burn in their home ten tons of
14 coal a year, or fifteen, depending on the size of it,
15 and the company would have to invest five hundred
16 dollars or one thousand dollars in burning equipment
17 for that home and get paid for it in maybe ten years.
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1 THE CHAIRMAN: I do not think you would
2 have to have anything of that magnitude.

3 MR. FAIRLEY: Maybe it is less than that,
4 but the cost of administering such a program would
5 be quite heavy, and quite a problem.

6 MR. CHAIRMAN: I do not suggest that at
7 all, but I do suggest that a fairly substantial part
8 of your previous coal sales were domestic sales?

9 MR. FAIRLEY: Yes sir.

10 THE CHAIRMAN: And I was told by one dealer
11 that he actually received from you last year as much
12 as he ever received and he has been in that business
13 for over forty years. There is no doubt the new
14 buildings are going up, but it is rather strange that
15 that cheaper price has held his total demand.

16 MR. FAIRLEY: I certainly hope it will
17 continue to hold it too.

18 THE CHAIRMAN: His trouble was that he could
19 not get what he wanted, when he wanted. Do your agents,
20 for instance, make any canvassing for spreading
21 delivery over the season? I can see where if all
22 these demands come in in October and November you
23 may have trouble.

24 MR. FAIRLEY: Yes sir.

25 THE CHAIRMAN: Have they made any concerted
26 effort to change the rate of marketing, because
27 everything else is changed?

28 MR. FAIRLEY: Regularly at the beginning
29 of the summer we put on quite a program to all our
30 agents, all our local salesman with the agents to



1 try to get them to buy as much as they will during
2 the summer. From time to time we have done varying
3 things, as Mr. Appleton I think pointed out, or Mr.
4 Gordon this morning. At times we have reduced prices
5 during the summer. At other times we have given
6 under certain conditions, long term credit. By
7 "long term" I mean three months, four months. It
8 would be put in in July and be paid three months later.
9 We have tried all those things, and they all help.

10 THE CHAIRMAN: I was wondering how it is.
11 What do you say to the statement by Mr. Appleton that
12 some of the independents have in the Montreal area
13 displaced your coal with theirs, and he attributed it
14 to lower cost of production. I have no doubt that
15 there is a reason for that. I would like to know
16 just what it is.

17 MR. FAIRLEY: In the Montreal area? Well
18 they are active, aggressive people too, and they just
19 in some cases have gotten the market.

20 THE CHAIRMAN: I was just wondering how
21 it is.

22 MR. FAIRLEY: Well in certain cases the
23 smaller independents are operating small mines, and
24 in most cases they are underground mines rather than
25 undersea mines. They have smaller tonnage, light
26 covering, lighter amount of rock over the seams, and
27 they do a good job of mining, frankly.

28 We are operating very large mines, and as
29 you know are out under the ocean. We don't know
30



1 entirely exactly what our positions cost so we think
2 that some of them are better than the others. We are
3 not positive of that.

4 THE CHAIRMAN: Well perhaps you can explain
5 this: how is it that it is generally agreed that for
6 large thermal production of electricity coal seems to
7 be used?

8 MR. FAIRLEY: Two reasons: in the case of
9 particularly in the United States coal in many cases
10 is cheaper where it is being used for the production
11 of electricity. Secondly, the best place to use coal
12 is in a very large plant where you can have big
13 quantities of it, and have very expensive, large size
14 equipment which can use it and use it very efficiently.

15 There isn't any bigger equipment, burning
16 equipment than you have in a big thermal power plant.
17 They build one piece of equipment, design it for coal
18 and it is a very efficient piece of equipment.

19 Thirdly, the thermal power plants, due to
20 the type of industry they are in, and the public
21 utility, they must have power constantly, all the time,
22 and it is much simpler and easier to store very large
23 quantities of coal. It is cheaper to store very large
24 quantities of coal than it is to store large quantities
25 of oil.

26 Now it is not unusual to see three or four
27 hundred thousand tons of coal at a big thermal plant.
28 If you have large tanks, had to build oil tanks to
29 hold enough oil to give that same amount of BTU, you
30

1 would spend a terrific amount of money on it. That
2 is the main reason.

3 It should be said that most of the big
4 power plants, depending on their location, are
5 designed to burn any one of three fuels along the
6 east cost seaboard in the United States where you
7 have the greatest concentration of power projects
8 in the world. Every plant there that I know of is
9 set up to burn coal, oil or gas and they shift back
10 and forth depending on the markets and what is cheapest
11 and what they can buy and what they can store at any
12 given time. They can burn all three of them. Some
13 of the plants burn only coal and oil but there are
14 very few plants that are set up to burn just one.

15 THE CHAIRMAN: I understand that some of
16 the plants in Quebec have now the means of making
17 use of any of those fuels?

18 MR. FAIRLEY: Yes, sir, that is correct.

19 THE CHAIRMAN: I suppose the surplus
20 electricity for secondary use, as you call it, is
21 really, as I understand it is on an interruptible
22 basis?

23 MR. FAIRLEY: Yes, it is on an interruptible
24 basis but as Mr. Appleton pointed out, when you have
25 a sustained long period of reduced business activity, ,
26 then the interruptible basis becomes just a theory and
27 in practice it is available all the time, maybe for
28 months at a time, and the contracts -- I have not
29 seen one of them, I have been told what they are
30 like -- the contracts are so drawn that people who



1 agree to buy it have to buy it if it is available
2 but they are also allowed to get it at a price which
3 is below the next competitive fuel, no matter what
4 that price is, even if it is well below it.

5 THE CHAIRMAN: I was wondering if we could
6 get some idea of the extent to which you are supplying
7 any level of industry in the Province here, you see,
8 just to get your opinion as to whether or not that
9 can be retained or whether your market could be
10 expanded in this Province. It seems to me that the
11 first consideration of coal generally in this Province
12 is to master the immediate market.

13 MR. FAIRLEY: I think you are correct there.
14 Absolutely. Can we furnish you with a complete
15 list of our customers here, and the history of each
16 shipment to them and what we estimate in the future?

17 THE CHAIRMAN: If it wouldn't be too much
18 trouble. I would like to get an idea what is taking
19 place in the local demand in industry and in commercial
20 buildings.

21 For instance, we know that elsewhere they
22 have what they call central heating in sections of
23 cities. Have you ever thought of that as being a
24 proper place for the use of coal?

25 MR. FAIRLEY: We have not only thought of
26 it, we are selling large quantities of coal for those
27 central heating plants.

28 THE CHAIRMAN: Have you any in this Province?

29 MR. FAIRLEY: No sir. In Montreal -- there
30 may be in this Province. If there are, I don't know



1 but in Montreal I know of two of them. We are
2 selling large quantities of coal to both of them.

3 THE CHAIRMAN: Is that mode of consumption
4 one that seems to have possibilities of maintenance
5 for coal?

6 MR. FAIRLEY: I would say it would have
7 possibilities for the simple reason there again
8 it is a big plant and to burn coal you need a big
9 plant to burn it efficiently that is.

10 THE CHAIRMAN: Is it part of your advertising
11 to suggest that sort of arrangement in cities? Take
12 Halifax or Saint John, to promote it, have your agent
13 going around -- why shouldn't he suggest unit of
14 heating areas.

15 MR. FAIRLEY: You mean suggest --?

16 THE CHAIRMAN: The installation, not by
17 you, but by him because I am given to understand it
18 is cheaper.

19 MR. FAIRLEY: Well of course we do that in
20 suggesting -- this is, if someone is going to build
21 an office building, say, we work with the Architects.

22 THE CHAIRMAN: Yes, I didn't mean the
23 individual building. I mean a square of a City,
24 or two squares, three squares.

25 MR. FAIRLEY: You mean suggest that
26 somebody build a central heating plant?

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1
2 THE CHAIRMAN: Yes.

3 MR. FAIRLEY: Well I don't know that we
4 have suggested anybody go in and build one, no, I
5 can't say that but where they have been built by
6 a company, or an interest -- for instance, the Sun
7 Life in Montreal has a big central heating plant
8 that uses a large area. The Westmount Realities
9 Limited has a large one. We sell substantial
10 quantities of coal to both of those. Mulgrove
11 Park in Halifax has one and we sell coal to them.
12 I didn't know about the one in Halifax.

13 THE CHAIRMAN: The only reason I am
14 suggesting these possibilities is because it
15 entirely rests in the people who know how to dis-
16 pose of it, but it seems to me that the oil and
17 the gas is being expanded not only by convenience
18 and even price, but by individual efforts, they
19 are anxious to get rid of these fuels and they are
20 making tremendous efforts of an individual and not
21 a general nature.

22 MR. FAIRLEY: That is true.

23 THE CHAIRMAN: It seems to me to be a
24 poor policy on the part of coal to allow that to go
25 by default.
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1 MR. FAIRLEY: THE only defence I can give
2 to that would be that we are not the only company that
3 is faced with that. Practically every American coal
4 company has been faced with exactly the same thing
5 and has had the same thing happen to it.

6 THE CHAIRMAN: It may be my inference is
7 not warranted. I am rather puzzled.

8 MR. FAIRLEY: I am sure you have had certain
9 complaints from certain dealers because they have not
10 been able to call us and get us the kind of coal they
11 wanted. We know that. I will say this : every single
12 complaint that we get, we investigate immediately. We
13 have even had two or three of them sent to some of
14 the government agencies, and I have arrangements that
15 when they are sent to these government agencies they
16 are immediately forwarded to me, and we have a complete
17 investigation made immediately.

18 Most of them, when investigated, turn out
19 not to be anywhere nearly as bad as they appear at
20 first, but there are some of them that are justified.

21 THE CHAIRMAN: In this Province has the
22 Provincial Government a policy of preference to coal,
23 as the Dominion has?

24 MR. FAIRLEY: The Provincial Government has
25 done an awful lot to help the coal industry in varying
26 ways. They do not have any such 20% arrangement do
27 they Mr. Manson? You could answer that quicker than
28 I could.

29 THE HONOURABLE MR. MANSON: Mr. Commissioner
30

1 I do not think there is any definite layed down
 2 policy enunciated, or set down on paper, or that
 3 any orders have been issued to that effect regarding
 4 all Provincial Buildings but where applicable at all
 5 coal has been used. I think that -- just making a
 6 rough guess -- ninety-five per cent of our buildings
 7 use coal. I am referring to Provincial Buildings.

8 THE CHAIRMAN: That is what I mean. That
 9 is the policy of the Dominion Government and it is
 10 maintained consistently, I understand, right through
 11 to the western boundaries of Ontario.

12 MR. FAIRLEY: If I may continue on with our
 13 summary and conclusions, that will complete our brief.

14 The greatest difficulties facing the coal
 15 mining industry of Nova Scotia are the cost of production
 16 and lack of markets. Every effort is being made to
 17 keep production costs at a minimum. To this end the
 18 operations have been mechanized to a substantial degree
 19 and mining techniques have been improved. Preparation
 20 plants have been erected and put into service. In
 21 spite of all this, production costs are still too high.
 22 The output of coal per man day in underground operations
 23 in the United States is three times as large as that
 24 of the Nova Scotia coal mines and the cost per ton
 25 of American coal, at the pithead, is about half of the
 26 cost in Nova Scotia. There are many reasons for this,
 27 some of which are --

- 28 (1) The American mines are underground instead
 29 of being submarine. Because of this advantage
 30



1 they are able to move the mine entries closer
2 to the working face, as it becomes economically
3 feasible to do so. This means much shorter
4 travel time and less cost involved in trans-
5 porting men and materials to the working face
6 and transporting coal from the working face
7 to the pithead. This is obviously impossible
8 when the working face is out under the ocean.

9 (ii) Seams of coal in most of the American mines
10 are thick and flat lying, which makes possible
11 a very high degree of mechanization.

12 (iii) The cover above the coal seams (the total
13 amount of rock overlying the coal) is much
14 lighter in the United States, which makes
15 possible the use of low cost, room and pillar
16 mining techniques. Due to the extreme depth
17 of the Nova Scotia mines, it is unsafe, and
18 indeed impossible, to use this method and, as
19 a result, the much more expensive longwall
20 mining method must be used.

21 The Dominion Coal Company is now experimenting
22 with a different type of longwall operation, known as
23 "Longwall retreating". If this type of operation can
24 be successfully carried on in the submarine mines of
25 Cape Breton, some worthwhile savings can be effected.
26 Experimental retreating longwalls are now being worked
27 to determine if such methods can be safely and
28 successfully carried on and, within the next year, this
29 will have been determined. If the experimental work
30 is successful, a retreating longwall system should be



1 the method adopted as general mining practice, where
2 it is possible to use it. With the adoption of the
3 retreating system, the use of conveyor belts should
4 be made more general throughout the collieries and,
5 in some cases, the belts should extend from the working
6 faces to the surface. This would cut production costs
7 somewhat, not only by reducing transport costs but
8 by minimizing delays in the operations which are
9 brought about when mine cars are used for underground
10 transportation purposes. It is not expected that a
11 great deal can be done on the longwall faces themselves,
12 apart from the completing of the installation of
13 yielding steel roof supports, for the equipment in use
14 on the faces is of the very latest design and under
15 normal conditions performs well.

16 In order to make the coal more acceptable
17 to customers, it is essential that a central preparation
18 plant be provided and that, incorporated in it, should
19 be equipment to clean and to dry the Minus $\frac{1}{4}$ " product.
20 A plant for cleaning and drying fine coal produced at
21 Sydney Mines is also needed. In addition, equipment
22 should be made available to dry the fine coal from the
23 stockpile in Montreal, so that it can be delivered to
24 customers sufficiently free of moisture to permit its
25 easy handling in their plants. It is estimated that
26 the cost of all these above mentioned improvements
27 would be approximately \$15,000,000 Unfortunately,
28 the Company cannot finance such capital expenditures
29 and assistance from other sources must be obtained if
30



1 the necessary work is to be undertaken.

2 The Sydney Coal Field contains the only large
3 reserves of high grade coal in Canada east of Alberta
4 and, in the interests of the nation, everything possible
5 should be done to safeguard these reserves for future
6 use. Since they are submarine, they cannot be readily
7 won from openings other than those which presently exist,
8 or which are proposed. In summary, these are the things
9 which can be done to reduce costs and to improve the
10 grade of product produced from the Nova Scotia mines.

11 Now, the ability to sell the products of the
12 Nova Scotia Mines in competition with American coal and
13 with other sources of energy, such as natural gas and
14 oil, is the most important single factor facing the
15 industry today. Major factors affecting the ability
16 of Nova Scotia coal to compete in the Canadian fuel
17 markets are, as has already been mentioned, the cost
18 of production, in some cases, an inadequately cleaned
19 product and the very high cost of transportation to
20 move this material to the market where it is to be
21 consumed.

22 Due to the series of cost factors mentioned
23 above, we know, from long experience, that the only
24 way to get the best possible cost from the Nova Scotia
25 mines is to see to it that they work constantly, with
26 virtually no idle time whatsoever. The cost of
27 maintaining idle mines, which extend several miles under
28 the sea, is so tremendous that it is impossible to
29 maintain them without incurring financial losses which
30



1 will quickly bankrupt the Company. This being the case,
2 it is foolish in the extreme to consider keeping mines
3 open, and in an operable condition, which will be
4 closed down thirty to forty per cent of the time due
5 to lack of markets for the coal. As has been clearly
6 pointed out, the most that we can expect for the next
7 few years is an annual market of 4,000,000 to 4,500,000
8 tons. With the productive capacity of the present mines
9 being substantially in excess of this figure, the only
10 alternative left is the permanent closure of certain
11 operations. The natural and logical move is to close
12 those mines which have high production costs, or which
13 produce a product which does not find ready acceptance
14 in the fuel markets. The Company has already stated
15 publicly that in order to bring any semblance of
16 stability to this industry, productive capacity must
17 be brought more nearly in line with the market for the
18 product.

19 If, at a later date, it appears that the
20 market for Nova Scotia coal should increase, due to the
21 use of this product for the production of thermal
22 power, or any other use which may develop, an improved
23 production can be secured by simply increasing the prod-
24 uction of the existing mines, or, if necessary, opening
25 a new slope in the Lingan area..

26 In addition to the action mentioned above,
27 it will still be necessary for the Federal Government
28 to maintain a substantial subvention program, to assist
29 in moving coal to the central markets of Quebec and
30



1 Ontario. If such a program is not maintained, it will
2 mean additional mine closures and the industry will
3 then have to contract itself to the point where it will
4 supply only markets immediately adjacent to the mines
5 in the Maritime Provinces. In addition to the increasing
6 competition from Canadian oil and natural gas, we are
7 faced, in Eastern Canada, with heavy competition from
8 foreign oil which could easily be cut off in time of
9 emergency. This problem has been recognized in the
10 United States and a partial solution reached by the
11 establishment of import quotas on oil entering that
12 country. It would be highly desirable for the Canadian
13 Government to consider some suitable form of protection
14 for its local fuel industries.

15 One bright spot for the Nova Scotia coal
16 industry exists in the possibility of selling substantial
17 quantities of slack coal for the production of thermal
18 power in Ontario. Tests have been made and it has been
19 proven that Nova Scotia coal is suitable for this
20 purpose. Furthermore, the Ontario Hydro Commission
21 has estimated that, over the next ten years, their need
22 for fuel to be used in the production of thermal power
23 will increase greatly. If Nova Scotia coal can secure
24 even a part of this market, it might well be an answer
25 to the future of this industry. Furthermore, while
26 this is a matter for the Government to determine,
27 nevertheless it should be borne in mind that if Nova
28 Scotia coal is not used for this purpose, the chances
29 are that imported American coal will be used.
30



1 Major purchases of American coal for this use would
2 result in a further imbalance in an already unfavourable
3 balance of trade with the United States. This could have
4 a substantial effect on the Canadian economy. If
5 Nova Scotia coal is to be moved into Ontario in large
6 quantities, it will necessitate a continuing program
7 of Government subvention. However, this money will be
8 paid to Canadian miners; to Canadian transportation
9 agencies and to various Canadian suppliers. In other
10 words, this money would stay within the country and
11 would not go outside to further aggravate an already
12 undesirable trade balance. This fact, I think, should
13 be considered quite strongly by the proper Government
14 agencies.

15
16 It is also desirable that the Government, in
17 considering the type and extent of the subvention
18 program which it may wish to establish for the future,
19 should consider establishing a definite program which
20 could be put into effect and assured for a five to ten
21 year period. The program would have to be flexible,
22 but, under present conditions, the industry is never sure
23 from year to year just exactly what the subvention program
24 will be.

25 This makes it impossible to work out any long
26 term plans and to make long term commitments for
27 efficient shipping and docking facilities, because,
28 without a continuing program of Government subvention,
29 not one ounce of Nova Scotia coal would move outside
30 the Maritime provinces. If some assurance could be



1 given of what the long term program would be, it
2 would then be possible for the Company to make more
3 intelligent plans.

4 In closing, I would like to pay tribute to the
5 excellent cooperation that we have received from the
6 Federal and Provincial Governments, and from the
7 Dominion Coal Board. All of these agencies have been
8 most generous and helpful in attempting to solve the
9 very difficult problems of the Nova Scotia coal
10 industry. We also appreciate the opportunity of
11 presenting this Brief before the Royal Commission on
12 Coal (1959), and if there is any information which the
13 Commission may desire, and which has not already been
14 presented, we will be happy to make it available.



1 THE CHAIRMAN: I would like to ask a few
2 questions. I take it from what you say that you
3 really are in a position to deal with the market
4 of the Maritime Provinces and you think that to some
5 degree at least a permanence can be maintained in that
6 supply? That is so?

7 MR. FAIRLEY: Yes.

8 THE CHAIRMAN: Do you think you could enlarge?

9 MR. FAIRLEY: Maritime markets?

10 THE CHAIRMAN: With its present area or scope.

11 MR. FAIRLEY: It is my own opinion, Mr.

12 Commissioner, that they will not enlarge very greatly,
13 and here is why I say that: now, we have forecasts of
14 the sale over the next five-year period, and even over
15 a ten-year period. These forecasts indicate that the
16 fuel used for the production of power, for instance,
17 will go up. I think Mr. Marsh referred to that this
18 morning, and he is quite right. That is true. They
19 will.

20 MR. CHAIRMAN: Go up?

21 MR. FAIRLEY: The demand for fuel to produce
22 electric power will increase.

23 THE CHAIRMAN: Oh, yes.

24 MR. FAIRLEY: However, the same time that
25 is increasing, we look for a gradual and general
26 decrease constantly over a period of time in domestic
27 sales. We say that simply because it happens every
28 where else, and I don't think we are much smarter than
29 the rest of the world.

1 THE CHAIRMAN: You may have a greater number
2 of population willing to take advantage of a cheaper
3 price even though it is not as convenient.

4 MR. FAIRLEY: We may. That is a possibility.
5 If you are asking my opinion, I would be inclined to
6 doubt that, but it is an opinion, I will admit, and
7 all I can do is be guided by what has happened in
8 other places where the same thing, the same situation
9 has existed.

10 So as these methods for fuel for production
11 of power increase, I think we will probably have a
12 corresponding decrease in some of this domestic fuel.

13 I do not know what the Census Bureau thinks,
14 but the population of the Maritime Provinces has not
15 increased as greatly as the rest of Canada over the
16 last -- over almost any period you may wish to take --
17 ten years or twenty years, and I do not see much on
18 the horizon which would indicate that it is going to
19 increase very greatly as time goes on. That being
20 the case, we are faced with more or less a static
21 population in this area. If not static, at least
22 a population level which will not increase as greatly
23 as the rest of Canada.

24 However, with the counterbalancing of picking
25 up sales in one place and maybe losing it in the other,
26 I do not think that the use of coal in the Maritime
27 Provinces is going to increase tonnagewise.

28 THE CHAIRMAN: What would you estimate that
29 to be today?
30



1 MR. FAIRLEY: Two million two today.

2 THE CHAIRMAN: Do you think you can hold
3 that quantity?

4 MR. FAIRLEY: That is our sales.

5 MR. APPLETON: Three million one.

6 MR. FAIRLEY: A little more if you include
7 the others. I think they will pretty well stay close
8 to the same. One of the difficulties, Mr. Commissioner,
9 is as we are able to increase the coal sales to the
10 power companies, or maybe to some industries that
11 would set up here, those are sales which the company
12 cannot make any money on. As a matter of fact, there
13 are a number of very large tonnage sales which we
14 make in the Maritime Provinces on which we lose money,
15 but we have to move this fine coal and so we sell it
16 and lose on it.

17 Now, you can counterbalance that a little
18 bit with some of your domestic sales where there is
19 a small profit in it, but if the profitable market is
20 going and you are left with expanding markets that is
21 not profitable you are in sort of a tough position.

22 THE CHAIRMAN: What is the total Maritime
23 market?

24 MR. FAIRLEY: Three million one.

25 MR. APPLETON: In the Maritimes.

26 THE CHAIRMAN: That includes steel?

27 MR. FAIRLEY: Yes, that includes metallurgical
28 uses in steel.

29 MR. APPLETON: Two million two for ourselves.
30



1 THE CHAIRMAN: Apart from the metallurgical
2 department?

3 MR. APPLETON: Yes.

4 THE CHAIRMAN: You think you would improve
5 that with a subsidy?

6 MR. FAIRLEY: I haven't given too much
7 thought to that, Mr. Commissioner. Let me see if
8 I understand you correctly. You mean a subsidy on
9 coal moving in the Maritime Provinces?

10 THE CHAIRMAN: Yes.

11 MR. FAIRLEY: Well, that would certainly
12 allow a flexibility certainly in the seeking out
13 of markets. We could cut prices here and there.

14 THE CHAIRMAN: I am just putting something
15 suppositiously. Supposing you had a subsidy of \$2.00
16 a ton on all coal sold in the maritime provinces,
17 could you expand the market you have today?

18 MR. FAIRLEY: I do not think I could answer
19 that right now for I haven't given it any thought.

20 THE CHAIRMAN: You might give it some thought.

21 MR. FAIRLEY: We certainly will.

22 THE CHAIRMAN: You see, the lower the
23 transportation charge, the greater the benefit to
24 you.

25 MR. FAIRLEY: That is correct, yes, sir.
26 Let me be sure that I understand what you are talking
27 about. Your supposition is if a \$2.00 subsidy per
28 ton is to be given on all coal mined?

29 THE CHAIRMAN: No, on all coal sold.
30



1 MR. FAIRLEY: All right. We are not going
2 to mine coal that we can't sell, so that is about
3 the same thing. Yes, sir we will give some thought
4 to that.

5 THE CHAIRMAN: I think you could contemplate
6 some degree of flexibility outside the Maritimes,
7 but it seems to be common sense to try, if you are
8 going to try to give this coal a market, to give it
9 in what I would call a natural market. Its
10 nearest market.

11 That has limitations I agree, but at the
12 same time puts you in a position of some degree
13 dominating your own market, it might be desirable.

14 MR. FAIRLEY: The only big catch that I
15 can see in that immediately on a quick thought about
16 it, is you are faced with this large tonnage of fine
17 coal which we produce.

18 THE CHAIRMAN: Yes.

19 MR. FAIRLEY: In order to have the coarser
20 coal which we sell for domestic use, we produce two
21 tons of fine coal for every ton of coarse coal we
22 produce.

23 THE CHAIRMAN: I do not have in mind so
24 much domestic coal as the extension of your industrial
25 and commercial sales.

26 MR. FAIRLEY: Well, of course, there is
27 not too much industrial sales in the Maritimes.

28 THE CHAIRMAN: That is a thought to be
29 considered of course.
30



1 MR. FAIRLEY: The big point is right now
2 most of the fine coal we produce gets into Quebec
3 or Eastern Ontario. The big paper mills and places
4 like that.

5 THE CHAIRMAN: Perhaps you could provide
6 a larger coal for the Maritime Provinces, and may be
7 compelled to do that, and the finer coal beyond the
8 Maritimes.

9 MR. FAIRLEY: That is exactly what we
10 are doing now. We go out of our way to supply the
11 coarse coal to the Maritimes where it is used domestically,
12 and where we know we must supply it. That leaves us
13 with this large quantity of fine coal, most of which
14 moves up into central Canada where fine coal is used
15 in the big industries.

16 You cut off that central Canada market there
17 for this fine coal, then we are not going to be able
18 to supply coarse coal to the Maritimes because we
19 won't produce one without producing the other.
20 It is a very difficult situation frankly. We have
21 been struggling with this for some time, and is
22 one reason we are looking so longingly at the possibility
23 of shipping fine coal or slack coal into Ontario.

24 THE CHAIRMAN: You have a maximum subsidy
25 to Toronto of \$7.75?

26 MR. FAIRLEY: Yes, sir.

27 THE CHAIRMAN: It seems I fancy to outside
28 people an extraordinary price to pay to be able
29 to sell coal.
30

1 MR. FAIRLEY: Yes, sir, I would have to
2 agree to that.

3 THE CHAIRMAN: And the only justification
4 would be its social and political effects -- effects
5 of not doing it.

6 MR. FAIRLEY: Effects of not doing it, yes.

7 THE CHAIRMAN: I wish you would think over
8 how that could be adjusted to a flat bonus or subsidy
9 on the local market, instead of, for instance, as
10 it has been suggested, of urging duty on imported
11 residual oil.

12 MR. FAIRLEY: We will certainly give it
13 every consideration. Again though let me point this
14 out too: from a social stand point here, if we
15 contracted industry, where we only supplied Maritimes
16 markets, we would be down to this two to three million
17 ton level which would really mean wholesale mine
18 closure.

19 THE CHAIRMAN: I am not suggesting you limit
20 your production to that market, but in order to deal
21 with this market as an alternative to suggesting a
22 duty on the imported oil.

23 MR. FAIRLEY: Do you have in mind, and I
24 do not want to delabour this point, do you have in
25 mind any suggestion in suggesting such a program, of
26 reducing the total amount of subvention?

27 THE CHAIRMAN: Not at the moment.

28 THE FAIRLEY: Yes, sir, I see.

29 THE CHAIRMAN: The further you master the
30



1 local market, the easier your position will become.

2 MR. FAIRLEY: Assuming that the local
3 market is enough to pick up the additional tonnage.

4 THE CHAIRMAN: Well, say your production
5 of the larger coal, a large part of it...

6 MR. FAIRLEY: That would move in these
7 provinces. That is where it is mainly moving now.

8 THE CHAIRMAN: You could easily get a
9 figure that would more than enable you to meet any
10 oil competition unless it was almost given away.

11 MR. FAIRLEY: Locally you mean?

12 THE CHAIRMAN: Yes, in the Maritimes.

13 MR. FAIRLEY: Yes.

14 THE CHAIRMAN: You would gain on that, which
15 would be an assistance towards the other, and at the
16 same time, that might be supplemented.

17 MR. FAIRLEY: That is probably right, but
18 I think if we are going to maintain the same levels
19 of production...

20 THE CHAIRMAN: It would lend itself to
21 a reduction where the other might not.

22 MR. FAIRLEY: Would you let us think about
23 that a little bit?

24 THE CHAIRMAN: Oh, certainly. These are
25 common problems. You do that.

26 MR. FAIRLEY: All right, sir, is that all,
27 sir?

28 THE CHAIRMAN: Unless there are some
29 questions.
30

1 MR. MARSH: We have some questions we would
 2 like to ask Mr. Gordon or Mr. Fairley: are there
 3 any reserves of coal that the company previously
 4 stated were held in reserve for the time when Florence
 5 would be closed?

6 THE CHAIRMAN: Would you repeat the question?

7 MR. MARSH: Are there any reserves of coal
 8 on the north side that the company previously stated
 9 were held in reserve for the time when Florence
 10 would close? In other words, when Florence closed
 11 they would automatically move into the other reserves.

12 MR. FAIRLEY: Well, the very large reserves
 13 of old Sydney, is that the only one? Except Old
 14 Sydney. Very large reserves and I repeat very large
 15 reserves there, and I guess that could be increased

16 THE CHAIRMAN: Where is Old Sydney?

17 MR. FAIRLEY: That is the old Sydney
 18 collieries where you were yesterday afternoon.

19 THE CHAIRMAN: You mean Princess?

20 MR. FAIRLEY: Yes, sir.

21 MR. MARSH: The only point, the only
 22 question there, Mr. Commissioner, it was stated
 23 quite a number of years ago by Mr. Gordon himself
 24 that there were reserves there for Florence when
 25 Florence would close. I understand at that time,
 26 the independent operators was making application
 27 to get at this certain seam. They wanted to start
 28 a mine there, and this was the answer given by the
 29 company.
 30



1 MR. GORDON: I have no recollection of any-
2 thing of that sort. The reserves held on the north
3 side of the Harbour are for the most, with the exception
4 of the coal being mined at Florence and Princess
5 high sulphur, rather high ash coal. There is no
6 question about it that the day will come when those
7 coals will be worked, but at the present time they
8 are not suitable for a large market, and they are
9 not the equivalent analysis of the coal we are
10 mining at the present time.

11 MR. MARSH: I would like to ask another
12 question?

13 THE CHAIRMAN: Yes, certainly.

14 MR. MARSH: It mentions in your brief that
15 you sold continuous miners overseas. Could we find
16 out how much was realized from the sale of these
17 continuous miners.

18 MR. FAIRLEY: Is that pertinent to this
19 hearing?

20 MR. MARSH: Oh, definitely, yes.

21 THE CHAIRMAN: What is the price that is
22 given?

23 MR. FAIRLEY: I might say they were built
24 down in Trenton, in another plant and sold by Trenton.
25 Dominion Coal Company only designed the thing,
26 and they bought theirs back from Trenton, so it was
27 built and sold by Trenton works in New Glasgow. There
28 were twenty of them, I think, sold to Germany
29 and England.
30



1 MR. APPLETON: One to Japan.

2 MR. MARSH: The reason I asked the question
3 is the fact that actually a great burden of the cost
4 of research was placed on the coal company and during
5 the process of research -- which incidentally is
6 still going on when you take the wedge into considera
7 tion -- a lot of money was lost, not only to the
8 company, but to the men in the process of research
9 by trial and by error.

10 This machine was actually started probably
11 about ten years ago and it is still in the process.
12 It is not completed as yet. It is still in the
13 process of being completed.

14 Now, the coal company absorbed a great
15 amount of cost during this research period of ten
16 years, and these machines were sold at their expense
17 overseas. That is the reason I bring this question
18 out at this time. That is why I asked how much.

19 MR. FAIRLEY: I couldn't answer your
20 question as to how much we made on it, but certainly
21 the fact that we were able to sell twenty-one more
22 reduced the price to Dominion Coal. We built
23 in addition to the thirty-nine we are using, an
24 additional twenty-one, and with respect to the
25 fact that it is still being developed, you are
26 absolutely correct. The minute we stop developing
27 it, we are through because when you start developing
28 any kind of equipment and stand stationary then you
29 are through for everybody else is continuing to
30 develop theirs. He will never get through with the

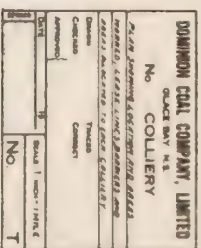


1 Dosco continuous miners I hope.

2 MR. MARSH: I hope so too.

3 MR. GORDON: As far as the sales outside
4 our corporation are concerned the Dominion Coal
5 Company gets a royalty on every one of these sales
6 to help in the development program.
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APPENDIX No. 1



LEGEND

ACADIA COAL COMPANY LEASEHOLD	
MINES NOT WORKING	SLOPE
MINES WORKING	SHAFT
SUBLEASE TO GREENWOOD COAL CO.	SLOPE
PROBABLE COAL RESERVES	ACADIA SEAM

DOMINION COAL COMPANY LIMITED	
GLACE BAY N.S.	
COLLIERY No.	
PLAN OF ACADIA COAL CO. LTD.	
LEASEHOLD SHOWING	
AREAS WORKED.	
DRAWN	TRACED
CHECKED	CORRECT
APPROVED	
DATE	19
Scale 1" = 2000'	No.

WESTVILLE AREA	
FOURTH SEAM	
THIRD SEAM	
SCOTT SEAM	
ACADIA SEAM	

STELLARTON AREA	
NORAH SEAM	
OIL COAL SEAM	
NEW SEAM	
MCGREGOR SEAM	
THIRD SEAM	
CAGE SEAM	
FOORD SEAM	

THORBURN AREA	
MCBEAN SEAM	
SIX FOOT SEAM	
MCKAY SEAM	
MILL RACE SEAM	
CAPTAIN SEAM	





DOMINION STEEL AND COAL CORPORATION, LIMITED

205

Coal Analysis

Colliery	Seam	Moist.	F.C.	V.M.	Sul.	Ash.	B.T.U.	Ash Fusion °F.
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Dominion Coal Company, Limited

No. 4	Phalen	1.78	54.32	33.78	4.92	11.90	13310	2020°F.
No. 12	Harbour	1.92	55.53	37.16	2.42	7.31	14140	2070
No. 16	Phalen	1.80	56.82	33.87	2.86	9.31	13590	2060
No. 18	Harbour	2.20	54.70	35.68	2.80	9.62	13710	2050
No. 20	Harbour	2.03	55.44	36.96	3.55	7.60	14100	2060
No. 26	Harbour	1.96	55.82	37.76	2.70	6.42	14320	2080
- All -		1.95	55.53	36.09	2.88	8.38	13830	2055

Old Sydney Collieries, Limited

Princess	Harbour	2.02	53.75	35.45	2.10	10.80	13330	2080
Florence	Harbour	2.13	53.79	35.44	1.99	10.77	13380	2070
- All -		2.07	53.76	35.44	2.06	10.80	13355	2075

Acadia Coal Company, Limited

McBean	McBean	1.59	58.90	27.72	0.53	13.38	12890	2460
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Office of Vice President, Mining Operations,
Sydney, N.S., January 21, 1960

Appendix No. 3



DOMINION STEEL AND COAL CORPORATION, LIMITED

Statement Showing Coal Reserves

206

Seam	Long Tons		Total	Economically Mineable Coal In The Probable Reserves
	Probable Reserves	Possible Reserves		
Dominion Coal Company, Limited				
Hub	63,000,000	141,500,000	204,500,000	51,000,000
Harbour	159,425,000	88,200,000	247,625,000	138,640,000
Phalen	132,843,000	101,100,000	233,943,000	103,370,000
Spencer	—	15,400,000	15,400,000	—
Mullins	—	24,900,000	24,900,000	—
Tracey	—	28,300,000	28,300,000	—
T o t a l s	355,268,000	399,400,000	754,668,000	293,010,000

Nova Scotia Steel and Coal Company, Limited

Lloyd's Cove	—	50,900,000	50,900,000	—
Hub or Stubbart	—	74,600,000	74,600,000	—
Harbour or				
Sydney Main	33,427,000	29,100,000	62,527,000	26,530,000
Indian Cove or				
Upper Jubilee	—	4,429,000	4,429,000	—
T o t a l s	33,427,000	159,029,000	192,456,000	26,530,000

Acadia Coal Company Limited

Westville Seam	—	8,000,000	8,000,000	—
McKay	—	1,100,000	1,100,000	—
McBean	3,579,000	—	3,579,000	2,830,000
T o t a l s	3,579,000	9,100,000	12,679,000	2,830,000

GRAND TOTAL 392,274,000 567,529,000 959,803,000 322,370,000

Office of Vice President, Mining Operations
January 21, 1960

Appendix No. 4



DISTANCE AND TRAVELLING TIME TO OR FROM WORKING PLACE

TIME IN MINUTES

MECHANICAL TRANSPORT IN FEET	WALK IN FEET		MINUTES REQUIRED IN GETTING TO OR FROM WORKING PLACE				TOTAL TIME	
	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average

Dominion Coal Company, Limited

No. 4	20,100	19,050	5,800	4,300	43	37	37	28	80	65
12	18,500	14,800	2,000	1,300	41	38	15	12	56	50
16	23,050	21,350	1,600	1,400	50	47	18	16	68	63
18	13,530	12,330	1,550	1,550	31	28	14	14	45	42
20	23,700	18,500	8,300	4,800	50	38	41	32	91	73
26	21,600	20,600	5,300	3,800	32	31	18	14	50	45
Weighted Average Time	-	-	-	-	-	-	-	-	65.8	56.7

Old Sydney Collieries, Limited

Princess	15,600	15,600	5,200	4,400	24	24	26	21	50	45
Florence	17,400	17,400	4,000	3,100	27	27	20	14	47	41
Weighted Average Time	-	-	-	-	-	-	-	-	48.8	43.4

Acadia Coal Company Limited

McBean	10,375	8,150	1,600	1,000	40	29	10	10	50	39
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ANGUS, STONEHOUSE & CO. LTD
TORONTO, ONTARIO

TONS OF COAL PRODUCED AND TONS PER MAN
PER OPERATING SHIFT
1945 to 1959 Inclusive

CALENDAR YEAR

COLLIERY		1945	1946	1947	1948	1949	1950
DOMINION COAL COMPANY							
No. 1-B	Output	456926	421876	362106	591816	589187	639528
	Tons Per Man	1.38	1.36	2.15	2.18	2.17	1.90
No. 2	Output	192274	170337	108396	132559	91698	
	Tons Per Man	1.33	1.36	1.96	1.94	1.67	
No. 4	Output	402434	482394	369950	544249	541106	547713
	Tons Per Man	2.08	2.29	2.76	2.87	2.83	2.76
No. 11	Output	108454	103675	76457	104014	73211	
	Tons Per Man	1.06	0.99	1.39	1.53	1.33	
No. 12	Output	396119	496461	413336	755206	743994	762527
	Tons Per Man	1.56	1.67	2.85	2.72	2.74	2.69
No. 16	Output	602830	486099	370544	580976	631790	722087
	Tons Per Man	1.70	1.57	2.22	2.23	2.41	2.45
No. 18	Output	169880	174552	63588	111720	121860	162894
	Tons Per Man	1.45	1.45	1.75	1.94	1.80	1.85
No. 20	Output	360104	439126	362380	530538	535535	616028
	Tons Per Man	1.68	1.84	2.19	2.16	2.18	2.27
No. 24	Output	216243	201751	123340	187351	181212	193613
	Tons Per Man	1.72	1.56	1.69	1.84	1.84	1.87
No. 25	Output	72780	74676	68360	121696	131234	169363
	Tons Per Man	1.63	1.65	2.30	2.52	2.61	2.51
No. 26	Output	55634	97040	109388	183017	205040	248014
	Tons Per Man	1.62	1.66	2.27	2.46	2.86	3.08
ALL COLLIERIES	Output	2922676	3129087	2428145	3843141	3845866	3951767
	Tons Per Man	1.57	1.61	2.18	2.31	2.34	2.37
OLD SYDNEY COLLIERIES							
Princess	Output	351867	384411	296752	446905	438510	400836
	Tons Per Man	2.11	2.20	2.70	2.68	2.63	2.44
Florence	Output	223652	235858	170052	331667	298864	316285
	Tons Per Man	1.60	1.72	2.17	2.39	2.20	2.41
No. 7	Output						17644
	Tons Per Man						2.21
ALL COLLIERIES	Output	575519	620269	466804	778492	737374	733764
	Tons Per Man	1.88	1.99	2.48	2.56	2.43	2.38
ACADIA COAL							
McBean	Output						
	Tons Per Man						
Allan	Output	111104	143941	117814	188128	182815	169133
	Tons Per Man	1.01	1.25	1.77	1.83	1.94	2.01
Albion	Output	229475	226584	163103	227740	199579	231013
	Tons Per Man	1.39	1.33	1.54	1.57	1.58	1.75
No. 7	Output	24843	20439	10064			
	Tons Per Man	2.25	2.44	2.80			
ALL COLLIERIES	Output	366312	390764	280981	416668	382394	390146
	Tons Per Man	1.28	1.33	1.65	1.68	1.73	1.85
CUMBERLAND RAILWAY AND COAL COMPANY							
No. 1	Output	117980	131160	93425	156611	115127	144257
	Tons Per Man	1.30	1.50	1.88	2.03	1.91	2.06
No. 2	Output	265114	278615	177036	278284	276586	298821
	Tons Per Man	1.77	1.79	2.06	2.22	2.19	2.37
No. 4	Output	149069	164573	135746	195185	187311	201846
	Tons Per Man	1.25	1.40	2.08	1.93	1.75	1.79
ALL COLLIERIES	Output	532163	569348	401207	629080	581024	645024
	Tons Per Man	1.48	1.60	2.02	2.07	1.97	2.09



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							7 Months Jan. 1st - July 31st	12 Months Aug. 1st - July 31st	
1951	1952	1953	1954	1955	1956	1957	1958	1959 - 59	1960
474889 1.67	421259 1.50	264009 1.55	277651 1.83	170606 2.00					
519191 2.49	517277 2.42	551420 2.40	555889 2.39	480113 2.21	476801 2.25	557876 2.76	558097 3.07		390829 3.02
741812 2.54 668661 2.15 148347 1.74 603021 2.22 190826 1.92	702582 2.35 548880 2.06 173691 1.92 537427 2.02 168814 1.83	630744 2.27 594505 2.13 203090 2.12 583085 2.16 96189 1.77	722583 2.43 600102 2.27 199558 2.10 663860 2.50	706556 2.54 640954 2.57 255892 2.81 626516 2.45	685570 2.63 643574 2.47 354534 3.07 693409 2.63	769327 2.88 573073 2.29 330888 3.15 766355 3.01	416238 2.86 285726 2.22 290604 4.24 464486 3.05		537601 2.88 427001 2.41 358328 3.96 451859 2.49
189255 2.57 292246 3.15	200384 2.70 299372 3.04	203627 2.67 346010 3.36	227426 2.92 306205 3.55	206582 2.73 473435 3.46	180330 2.52 556510 3.47	157732 2.75 784070 3.72	72990 2.80 473436 3.40		85001 2.50 722008 3.44
3628248 2.23	3569686 2.12	3472679 2.22	8553155 2.42	3562653 2.56	3690728 2.69	3919321 2.92	2361576 3.04		2973365 2.95
411860 2.57 290118 2.11 16947 1.96	372530 2.25 249681 1.81 41224 3.56	397147 2.31 317022 2.18 33693 3.78	381057 2.28 323616 2.27 29412 4.41	390519 2.26 311912 2.13 27298 4.35	363549 2.34 293507 2.11 6112 1.96	455912 2.77 302805 2.15	291962 2.78 184870 2.17		415071 2.90 214363 1.93
718925 2.35	663635 2.10	747862 2.29	733984 2.32	729729 2.24	683268 2.23	758717 2.49	478822 2.51		629434 2.47
81951 1.70 248367 1.88		21358 2.08	180919 2.23	194438 2.11	209401 2.04	182327 2.00	130516 2.44		196314 2.30
	238962 1.89	246936 2.11	211844 2.32	121738 1.88	154800 2.10	8329 1.90			
330318 1.83	238962 1.89	268294 2.10	392763 2.27	316176 2.01	364201 2.07	190656 2.00	130516 2.44		198314 2.30
155978 2.13 279898 2.22 232422 2.01	159148 2.17 276257 2.16 225992 1.84	134441 1.81 258896 2.02 222995 1.89	81552 1.91 340104 2.16 223968 1.88	409397 2.26 265546 2.08	342838 1.99 205170 1.92	385351 2.10	225807 2.12		65110 2.04
668298 2.12	661397 2.04	616332 1.93	645624 2.02	674943 2.18	648108 1.96	385351 2.10	225807 2.12		65110 2.04



AVERAGE OUTPUT PER MAN PER DAY IN
BITUMINOUS UNDERGROUND MINES IN U.S.

YEARS 1945 - 1958 INCLUSIVE

Year	Net Tons (2,000#)
1945	5.04
1946	5.43
1947	5.49
1948	5.31
1949	5.42
1950	5.75
1951	6.08
1952	6.37
1953	7.01
1954	7.99
1955	8.28
1956	8.62
1957	8.91
1958	9.38

Source: U.S. Bureau of Mines

Appendix No. 7



STATEMENTS SHOWING OUTPUTS AND
CAPACITY OUTPUTS OF COLLIERIES

<u>Dominion Coal</u>	<u>Average Daily Output 1959</u>	<u>Present Daily Output Capacity</u>	<u>Possible Daily Output Capacity</u>
No. 4	2448	2372	3000
12	3163	3554	3800
16	2681	2772	3000
18	1875	2490	2800
20	2695	3924	4500
25	489	-	-
26	3551	4130	5000
<hr/>			
<u>Old Sydney Collieries</u>			
Princess	2147	2582	4000
Florence	1140	1405	1300
<hr/>			
<u>Acadia Coal</u>			
McBean	861	901	1000
<hr/>			
TOTAL	21,050	24,130	28,400



DOMINION STEEL AND COAL CORPORATION, LIMITED
COAL OPERATIONS

Absenteeism Based on Calendar Year 1959

PERCENT OF ABSENTEEISM:-

UNAVOIDABLE

AVOIDABLE

	TOTAL	Compensation	Sick	Permissio	TOTAL	Without	Refused	Action	TOTAL
	%	%	%	%	%	Permissio	Work	Fellow	%
							Offered	Employees	%
<u>SURFACE</u>									
Dominion Coal Company Limited	6.85	-1.07	2.39	.03	3.49	3.30	-	-	3.30
Old Sydney Collieries	5.04	.54	2.40	.01	2.95	2.01	.08	-	2.09
Acadia Coal Company	5.60	1.90	1.10	.20	3.20	.80	-	.20	2.40
TOTAL	6.46	1.03	2.31	.04	3.38	2.93	.01	.01	3.08
<u>PRODUCERS</u>									
Dominion Coal Company, Limited	14.46	3.98	2.97	.03	6.98	7.39	-	-	7.48
Old Sydney Collieries	12.62	2.14	2.55	.03	4.72	7.43	.47	-	7.90
Acadia Coal Company	12.20	5.30	1.90	.20	7.40	2.30	-	.30	4.80
TOTAL	13.93	3.77	2.80	.04	6.61	6.95	.08	.26	7.32
<u>LONGWALL MAINTENANCE</u>									
Dominion Coal Company Limited	16.87	4.39	3.75	.02	8.16	8.59	-	.12	8.71
Old Sydney Collieries	10.07	1.48	2.58	-	4.06	5.83	.18	-	6.01
Acadia Coal Company	19.80	6.10	4.80	.30	11.20	5.40	-	.40	8.60
TOTAL	15.47	3.81	3.53	.03	7.37	7.85	.04	.20	8.10
<u>OTHERS UNDERGROUND</u>									
Dominion Coal Company, Limited	13.30	2.93	3.17	.04	6.14	7.10	-	.06	7.16
Old Sydney Collieries	10.60	1.60	2.65	.03	4.28	6.09	.23	-	6.32
Acadia Coal Company	12.70	3.20	3.10	.30	6.60	3.30	-	.30	6.10
TOTAL	12.72	2.70	3.06	.05	5.81	6.61	.04	.23	6.91
<u>ALL EMPLOYEES</u>									
Dominion Coal Company Limited	13.41	3.19	3.16	.03	6.38	6.96	-	.07	7.03
Old Sydney Collieries	10.19	1.55	2.59	.01	4.15	5.80	.24	-	6.04
Acadia Coal Company	12.70	4.00	2.80	.20	7.00	3.00	-	.40	5.70
TOTAL	12.73	2.92	3.02	.04	5.98	6.46	.05	.22	6.75



DOMINION STEEL AND COAL CORPORATION, LIMITED
PENSION FUND

Employees of the Dominion Steel and Coal Corporation, Limited, or of any of its constituent companies or of any other company or corporation a majority of the capital stock of which is owned or controlled by the Dominion Steel and Coal Corporation or by any of its constituent or subsidiary companies, may obtain pensions under the following conditions which are adopted for the regulation of the Dominion Steel and Coal Corporation, Limited Pension Fund.

The Fund being established voluntarily by the Corporation as a provision for the benefit of employees superannuated or incapacitated after long service, constitutes no contract and confers no legal rights upon any employee.

Whenever in these regulations the following terms are used they shall have the meanings set opposite each of them respectively:

Corporation	Shall mean the Dominion Steel and Coal Corporation, Limited.
Board	Shall mean the Board of Directors of the Corporation.
Pension Committee	Shall mean the Committee pointed by the President for the administration of the fund.
Service	Shall mean employment by the Dominion Steel and Coal Corporation or by any corporation or company the majority of the capital stock of which is owned by the Corporation or the constituent Companies or their subsidiaries.

ADMINISTRATION

The fund shall be administered by a Committee to be known as the Pension Committee.

The Committee shall from time to time report all actions and decisions to the President for confirmation, but subject to such confirmation or to any modification that may be made by the President, all actions and decisions of the Committee shall take effect as from the date of the action or decision of the Committee.

The Committee shall make rules for the efficient administration of the Fund, which upon approval by the President, shall determine its procedure in all cases.



The Committee shall have power:

- (a) To determine the eligibility of employees to receive pensions.
- (b) To fix the amount of such pensions.
- (c) To discontinue payment of pensions for cause.

PENSIONS

Pensions shall be granted:

1. To any male employee who has been twenty-five years in the service and who has reached the age of sixty-five years or more and who is retired from service either at his own request or the request of his employing officer.
2. To any female employee who has been twenty-five years in the service and has reached the age of fifty-five years or more, and who is retired from service either at her own request or the request of her employing officer.
3. To any employee who has been fifteen years in the service and who during the course of his employment through an accident has become permanently and totally incapacitated for further service.
4. The President of the Corporation may in his discretion instruct and direct the Committee to include in the Pension Scheme employees whose length of service has not reached the limits above provided for, or employees who may for other reasons be ineligible for pensions under these regulations.

AMOUNT OF PENSIONS

The amount of pensions which shall be paid monthly to persons retired under the provisions of the fund shall be at the rate of one per cent of the average monthly pay received by them during the last ten years of their service multiplied by the number of years of their entire service.

Illustration: An employee has been in the service 30 years and during the last ten years has received \$1000 per annum or \$83.33 per month. His monthly pension would be one per cent of \$83.33 or \$0.83 multiplied by 30, equal to \$25.00.

Provided, however, that no pension shall be more than \$75.00 per month.



GENERAL REGULATIONS

1. Pensions from the fund will be paid only to those employees who have given their entire time to the service of corporation included under the provisions of the fund.
2. The acceptance of a pension from the fund shall not bar any retired employee from engaging in other business as long as such other business is not of the same character as that of the Corporation or its constituent or subsidiary Companies.
3. Length of service shall be reckoning from the date since which the employee has been continuously in the service to the date when retired.
4. Up to and not exceeding two (2) years out of service shall not be considered as breaks in the continuity of service, but the time thus lost shall be deducted in reckoning the length of service.
5. Pensions shall be paid to the pensioners, at the close of each month after the date of commencement, which shall be fixed in each case by the Committee, and until revoked by the Committee or until the month succeeding that in which the death of the pensioner occurs.
6. Pensions may be suspended or terminated in case of misconduct on the part of the pensioner or for any other cause sufficient in the judgment of the Committee to warrant such action.
7. In order that direct personal relations with retired employees may be preserved and that such employees may continue to enjoy the benefits of pensions granted them, no assignment of pensions will be permitted or recognized under any circumstances; neither shall pensions be subject to attachment or other legal process for debts of the beneficiaries.
8. The decision of the Committee determining the rights of employees under these regulations shall be final subject to a right of appeal to the President, provided notice of appeal is given within thirty days of the date of the action of the committee against which the appeal is made.

The decision of the Board shall be final and conclusive.
9. Neither the creation of this fund nor any other action at any time taken by the Board of Directors of the President shall give to any employee a right to be retained in the service, and all employees remain subject to discharge to the same extent as if this Pension Fund had never been created.
10. The pension fund and the regulations respecting it may be amended or repealed at any time by the Board of Directors at its discretion.



RULES AND REGULATIONS

1. A Chairman shall be appointed by the Pension Committee to preside at all meetings of the Committee.

A secretary shall be appointed who shall have charge of the records of the Pension Fund. It shall be his duty to keep himself informed of the whereabouts of all employees who have been retired from the service, and he shall require satisfactory evidence from each of such employees at least once a year that he still comes within the rules of the Pension Fund.

2. The office of the Pension Fund shall be at Sydney.

3. All communications should be addressed to the Secretary, Pension Fund, or Superintendent.

Other meetings may be held if necessary at the call of the Superintendent.

SUGGESTIONS FOR APPLICATION OF PENSION RULES

The officer in charge of the Staff Records of the Corporation shall report to the ranking officer of the Company concerned the names of all employees who will attain during the ensuing six months the requisite age for a pension allowance.

Those names will be submitted to the Management of the Company concerned, and he will be asked to indicate whether the men are still capable of further efficient service or whether in his opinion they should be retired on pension.

If the Management of the Company concerned considers that the men are eligible for pension, he will have a form completed and returned to the ranking officer of the Company, who, when the forms are approved will forward them to the Secretary of the Pension Committee.

Wherever possible the Service Record should be certified from the time records. If, however, the time records are not complete, efforts should be made to establish the term or terms of service through old officials or old trustworthy employees. In the absence of records, in case the employee claims service for a greater length of time than can be established through old officials or employees, the employing officer should make recommendations, based upon the facts which the



- 5 -

employee can offer in substantiation of his claims, and upon his reliability whether the whole time claimed should be allowed, or, if not, what portions thereof. In the event of doubt as to what service to allow an employee, the employing officer should certify to what he feels it proper to allow, and state the facts, by letter attached to the form, and the Pension Committee will decide the question. This letter shall be attached to and become part of the pension report.

Pay rolls covering all pension allowances, showing the names and such other particulars as are necessary of those to whom such allowances have been made and the amount of such allowances, shall be prepared at the close of each month by the Secretary of the Pension Fund; shall be certified by him; shall be countersigned by at least one member of the Committee, and shall be forwarded to the Comptroller's Department for payment.

When we calculate pensions to individuals based on our present Pension Plan, who have reached their 70th birthday, the \$40.00 paid by the Government will be deducted, the Company paying the net result. However, in no case will the Company pension be reduced under \$25.00 per month.

The pension of any individual of less age than 70 years will be calculated and paid, based on our present Pension Plan, the amount to which he is entitled until the age of 70 years, at which time the \$40.00 will be deducted. However, in no case will the Company pension be less than \$25.00 per month.



ACADIA COAL

PENSIONERS

<u>YEAR</u>	<u>NUMBER OF PENSIONERS AT YEAR'S END</u>	<u>AVERAGE MONTHLY PENSION</u>	<u>AVERAGE ANNUAL PENSION</u>	<u>ANNUAL EXPENDITURES ON PENSIONS</u>
1945	3	\$ 85.00	\$ 1,020.00	\$ 3,060.00
1946	2	96.54	1,158.48	2,510.00
1947	99	39.35	472.20	25,065.41
1948	109	44.75	537.00	56,608.40
1949	122	46.05	552.60	63,927.90
1950	118	47.51	570.12	69,889.50
1951	139	48.38	580.56	75,035.25
1952	142	50.07	600.84	87,380.50
1953	167	51.15	613.80	92,800.40
1954	163	52.68	632.16	102,616.00
1955	162	52.26	627.12	101,378.75
1956	165	51.93	623.16	100,234.15
1957	171	53.62	643.44	109,976.65
1958	183	52.78	633.36	106,631.00
1959	168	52.08	624.96	109,061.00

Sydney, N.S.,
January 29, 1960.

Appendix No. 10 - Pg. 6



OLD SYDNEY COLLIERIES

PENSIONERS

<u>YEAR</u>	<u>NUMBER OF PENSIONERS AT YEAR'S END</u>	<u>AVERAGE MONTHLY PENSION</u>	<u>AVERAGE ANNUAL PENSION</u>	<u>ANNUAL EXPENDITURES ON PENSIONS</u>
1945	-	-	-	-
1946	95	\$ 37.96	\$ 455.52	\$ 16,890.50
1947	166	41.02	492.24	68,003.26
1948	175	44.72	536.64	91,577.14
1949	180	46.14	553.68	98,316.90
1950	190	48.19	578.28	109,864.00
1951	204	50.39	604.68	120,083.76
1952	212	52.12	625.44	130,988.40
1953	224	53.32	639.84	136,918.15
1954	237	52.92	635.04	145,481.25
1955	242	53.53	642.36	156,634.95
1956	255	54.07	648.84	161,821.25
1957	253	53.71	644.52	160,315.90
1958	249	52.59	631.08	157,413.50
1959	241	52.03	624.36	151,882.50

Sydney, N.S.,
January 29, 1960.

Appendix No. 10 - Pg. 7



CUMBERLAND RAILWAY & COAL COMPANY

PENSIONERS

<u>YEAR</u>	<u>NUMBER OF PENSIONERS AT YEAR'S END</u>	<u>AVERAGE MONTHLY PENSION</u>	<u>AVERAGE ANNUAL PENSION</u>	<u>ANNUAL EXPENDITURES ON PENSIONS</u>
1945	37	\$ 44.59	\$ 535.08	\$ 21,537.70
1946	29	48.14	577.68	18,824.00
1947	160	46.75	561.00	55,014.52
1948	164	45.40	544.80	92,449.75
1949	173	45.60	547.20	95,799.25
1950	181	46.75	561.00	100,523.75
1951	184	48.08	576.96	105,958.50
1952	184	48.83	585.96	108,559.75
1953	177	49.12	589.44	105,747.75
1954	178	49.36	592.32	106,031.75
1955	182	49.55	594.60	107,374.75
1956	186	49.37	592.44	109,648.38
1957	220	50.48	605.76	120,646.75
1958	243	53.69	644.28	144,042.75
1959	231	52.66	631.92	150,387.25

Sydney, N.S.
January 29, 1960.

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SYDNEY & LOUISBURG RAILWAY COMPANY

PENSIONERS

<u>YEAR</u>	<u>NUMBER OF PENSIONERS AT YEAR'S END</u>	<u>AVERAGE MONTHLY PENSION</u>	<u>AVERAGE ANNUAL PENSION</u>	<u>ANNUAL EXPENDITURES ON PENSIONS</u>
1945	-	-	-	-
1946	-	-	-	-
1947	-	-	-	-
1948	-	-	-	-
1949	-	-	-	-
1950	74	\$ 59.97	\$719.64	\$ 50,256.25
1951	73	60.64	727.68	51,845.50
1952	72	61.63	739.56	52,695.50
1953	77	63.65	763.80	56,525.75
1954	82	62.81	753.72	60,042.27
1955	83	61.32	735.84	63,163.37
1956	77	60.93	731.16	58,917.87
1957	79	60.41	724.92	56,183.12
1958	76	59.86	718.32	55,672.54
1959	82	59.82	717.84	56,528.50

The information for the Sydney & Louisburg Railway Company for the years 1945 to 1949 is included in the Dominion Coal Company, Limited figures for these years.

Sydney, N.S.
January 29, 1960.

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DOMINION COAL COMPANY, LIMITED
PENSIONERS

YEAR	NUMBER OF PENSIONERS AT YEAR'S END	AVERAGE MONTHLY PENSION	AVERAGE ANNUAL PENSION	ANNUAL EXPENDITURES ON PENSIONS
1945	341	\$ 41.35	\$ 496.20	\$ 160,782.68
1946	325	42.20	506.40	164,053.25
1947	988	46.25	555.00	361,805.46
1948	1,023	46.45	557.40	571,267.98
1949	1,041	47.60	571.20	604,621.97
1950	1,024	48.13	577.56	603,910.61
1951	1,070	49.84	598.08	637,637.35
1952	1,108	51.20	614.40	671,141.75
1953	1,131	52.34	628.08	706,275.35
1954	1,174	52.78	633.36	726,923.81
1955	1,206	53.86	646.32	781,263.29
1956	1,257	54.34	652.08	814,097.64
1957	1,263	54.53	654.36	820,669.63
1958	1,283	54.45	653.40	831,944.46
1959	1,283	54.44	653.28	839,733.75

NOTE: Included in the Dominion Coal Company figures above for the years 1945 to 1949 (incl.) are the Dominion Shipping Company, the Sydney & Louisburg Railway and the Seaboard Power Corporation.

However during these years the Dominion Shipping and Seaboard pensioners never numbered more than 6.

Sydney, N.S.
January 29, 1960.

Appendix No. 10 - Pg. 10



SUMMARY OF ADDITIONS TO FIXED ASSETS
FOR THE YEARS 1945 to 1959 INCLUSIVE

Items	Mechanization	Mechanization	Other		Totals
	Government Loan	Company Account	Improvements	Capital	
<u>Dominion Coal Company</u>					
Mechanization Project - Government Loan:					
Diesel Locomotives	\$1,432,136				\$1,432,136
Aluminum Mine Cars	1,349,663				1,349,663
Continuous Miners	4,610,172				4,610,172
Joy Loaders	1,211,937				1,211,937
Tunnels to Harbour Seam	1,244,929				1,244,929
Wash Plant	589,469				589,469
Other	<u>43,319</u>				<u>43,319</u>
Total Mechanization	\$10,481,625				\$10,481,625
Other Capital Equipment:					
Continuous Miner (Experimental & Eng.)		\$ 161,681			\$ 161,681
Mechanization other than Mech. Loan		978,852			978,852
Car and Electrical Repair Shop				\$ 250,172	250,172
Main Hoist Installation - No.1-B Colliery				148,199	148,199
Steel Mine Cars				546,420	546,420
Sydney Mines Loaders			\$	412,510	412,510
Electrification of Surface Hoists				642,608	642,608
Railway Equipment (Cars & Locos.)				2,104,412	2,104,412
Coal crane and tractor - Three Rivers Agcy.				92,825	92,825
Coal Bridge - Halifax Agcy.				100,000	100,000
Barge "Salvus"				79,673	79,673
Tug "Empire John"				138,394	138,394
Dwellings				47,300	47,300
Other - excluding mechanization				3,844,826	3,844,826
Total Excluding Mechanization		<u>\$1,140,533</u>		<u>\$1,055,118</u>	<u>\$7,352,221</u>
Total Dominion Coal Company:	\$10,481,625	\$1,140,533	\$1,055,118	\$7,352,221	\$20,029,497



Items	Mechanization Government Loan		Mechanization Company Account		Improvements		Other Capital		Totals
Old Sydney Collieries									
Mechanical Loading Equip. (Princess)			\$	120,988				\$	120,988
Continuous Miners and Installations				1,192,536					1,192,536
Central Coal Cleaning Plant				977,593					977,593
Preparation for Tunnel - Princess				1,862,464					1,862,464
Wash House North Sydney Pier									
Locomotives				269,463			\$	27,087	27,087
Sydney Mines Loaders					\$	83,404		62,979	332,442
Relay Haulage Installation								97,094	83,404
Electrification of Haulage Engines						40,002			97,094
Transformers								40,002	40,002
Equipment for Drying Slurry						48,476		55,224	55,224
Tipple and Dust Control and Car Handling									48,476
Facilities Underground									
Rope Belt Conveyor				87,676					87,676
Conveyor Installations (Surface)				173,859					173,859
Bankhead						49,767			49,767
3-Ton Aluminum Mine Cars				384,147		164,371			164,371
Development of Return Airway								384,147	384,147
Fine Coal Screens and Conveyors						386,740			386,740
Central Heating Plant						25,836			25,836
Steel Roof Jacks						43,465			43,465
Miscellaneous						75,817			75,817
								281,018	281,018
Total Old Sydney Collieries:									
			\$5,068,726		\$	917,878	\$	523,402	\$ 6,510,006

Acadia Coal Company

Development of McBean Colliery
 Coal Chutes
 Trucks and Tractors
 Railway Equipment
 Automobile
 Electric Engines
 Dryer for Wash Plant
 Conveyors
 3-Ton Mine Cars
 Steel Roof Supports
 Miscellaneous

\$ 133,380	\$1,873,713		
	30,873		
		\$ 14,793	\$ 2,007,093
		5,084	30,873
		3,825	14,793
		15,173	5,084
			3,825
			15,173
			33,022
			102,869
			40,806
			92,945
		13,207	13,207
\$ 133,380	\$2,174,228	\$ 52,082	\$ 2,359,690

Total Acadia Coal Company:

SUMMARY

Dominion Coal Company, Limited
 Old Sydney Collieries, Limited
 Acadia Coal Company Limited

\$10,481,625	\$1,055,118	\$7,352,221	\$20,029,497
	917,878	523,402	6,510,006
	133,380	52,082	2,359,690
\$10,481,625	\$4,147,224	\$7,927,705	\$28,899,193

Grand Total

Sydney, N.S.,
 February 19, 1960

Appendix No. 11 Pg. 3



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DOMINION COAL COMPANY LIMITED

NUMBER OF MEN EMPLOYED BY CATEGORY

AT DECEMBER 31, 1959

NUMBER
EMPLOYED

COLLIERIES

Surface	594	
Underground	3,609	
Mining	<u>1,012</u>	5,215

AUXILIARY DEPARTMENTS

Shops	241	
Construction	34	
Transportation	11	
Electrical	48	
Property	26	
New Waterford Construction	15	
Warehouse	20	
Piers	<u>202</u>	597

TERMINALS

Montreal	69	
Three Rivers	16	
Halifax	<u>9</u>	94

SALARIED EMPLOYEES

836

TOTAL

6,742

SYDNEY & LOUISBOURG RAILWAY COMPANY

412

TOTAL

7,154



OLD SYDNEY COLLIERIES

NUMBER OF MEN EMPLOYED BY CATEGORY

AT DECEMBER 31, 1959

COLLIERIES

Surface	119	
Underground	841	
Mining	229	1,189

AUXILIARY DEPARTMENTS

Railway	21	
Banking Station	31	
Pier	53	
Washplant	49	
Mechanical and Electrical	63	217

SALARIED EMPLOYEES 164

TOTAL EMPLOYED 1,570



ACADIA COAL

NUMBER OF MEN EMPLOYED BY CATEGORY

AT DECEMBER 31, 1959

		<u>NUMBER EMPLOYED</u>
<u>COLLIERY</u>		
Surface	39	
Underground	258	
Mining	85	
	<u>382</u>	
<u>AUXILIARY DEPARTMENTS</u>		
Washplant	9	
Power Plant	3	
Railway	9	
Mechanical and Electrical	13	34
	<u>50</u>	
SALARIED EMPLOYEES		
		<u>466</u>
<u>TOTAL</u>		<u>466</u>



NUMBER OF MEN EMPLOYED

AT DECEMBER 31, 1959

SUMMARY

Dominion Coal Company, Limited	7,154
Old Sydney Collieries, Limited	1,570
Acadia Coal Company Limited	466
	<hr/>
Total:	<u><u>9,190</u></u>



DOMINION COAL COMPANY, LIMITED

AGE DISTRIBUTION OF PERSONNEL EMPLOYED

229

AT DECEMBER 31, 1959

Age	Collieries	Auxiliary Departments	Agencies	Salaried Employees	Sydney & Louisburg Railway Company	Total
18				2	1	3
19	48	4		4	4	60
20	64	4	1	9	7	85
21	133	7	1	10	2	153
22	158	11		5	11	185
23	138	14	2	17	5	176
24	116	6	4	13	10	149
25	111	10	1	11	10	143
26	106	16	2	6	13	143
27	117	11		12	14	154
28	150	12	2	9	5	178
29	103	11	2	7	9	132
30	107	24	1	4	22	158
31	108	13	2	16	14	153
32	88	9	1	11	15	124
33	124	11	5	10	11	161
34	108	11	3	15	9	146
35	138	6	2	13	10	169
36	112	8	1	16	9	146
37	118	13	6	20	9	166
38	122	7	3	15	8	155
39	107	4	3	22	7	143
40	119	11	3	12	12	157
41	119	17		13	5	154
42	128	10		17	13	168
43	122	9	3	18	6	158
44	101	12	3	21	7	144
45	120	8	2	20	9	159
46	148	12		22	5	187
47	122	12	3	33	5	175
48	145	12	2	38	5	202
49	127	15	1	24	7	174
50	118	24	2	31	6	181

Appendix 12 Pg. 5



ANGUS, STONEHOUSE & CO. LTD
TORONTO, ONTARIO

Age	Collieries	Auxiliary Departments	Agencies	Salaried Employees	Sydney & Louisburg Railway Company	230 Total
51	110	18	3	34	10	175
52	132	18	3	25	10	188
53	120	14	2	28	5	169
54	108	18	3	27	9	165
55	99	26	1	20	14	160
56	113	17	2	24	6	162
57	104	17	1	15	8	145
58	95	18	3	20	8	144
59	96	15	1	19	5	136
60	101	12	3	18	8	142
61	57	10	2	17	3	89
62	58	10		14	6	88
63	63	8		12	4	87
64	75	9	1	13	4	102
65	61	5		13	4	83
66	35	7	1	7	6	56
67	17	6	5	6	6	40
68	12	3		6	2	23
69	5	4		3	1	13
70	4	2		6	6	18
71		3		4	2	9
72	2	1		1		4
73	1	1		2		4
74	1			2		3
75			1	2		3
76	1			1		2
77				1		1
78			1			1
80		1				1
TOTAL	5,215	597	94	836	412	7,154



OLD SYDNEY COLLIERIES

231

Age Distribution of Personnel Employed

At December 31, 1959

<u>Age</u>	<u>Collieries</u>	<u>Audliary Department</u>	<u>Salaried Employees</u>	<u>Total</u>
19	8	1	1	10
20	29	1	1	31
21	33	2	2	37
22	23	9	—	32
23	29	4	2	35
24	37	2	2	41
25	34	6	1	41
26	34	6	1	41
27	22	7	1	30
28	42	2	—	44
29	21	4	2	27
30	34	2	1	37
31	19	2	1	22
32	17	3	2	22
33	21	3	—	24
34	35	6	3	44
35	27	2	1	30
36	28	6	2	36
37	42	3	2	47
38	38	2	3	43
39	24	1	1	26
40	30	7	5	42
41	30	8	3	41
42	30	6	5	41
43	28	5	2	35
44	26	4	6	36
45	26	6	1	33
46	21	6	6	33
47	18	7	6	31
48	27	11	3	41
49	28	5	7	40
50	27	4	5	36
51	21	8	7	36
52	18	3	6	27
53	22	10	11	43
54	20	7	3	30
55	24	6	8	38
56	18	2	4	24
57	13	1	3	17
58	20	3	4	27
59	12	1	7	20

Appendix 12 Pg. 7



ANGUS, STONEHOUSE & CO. LTD
TORONTO, ONTARIO

232

<u>Age</u>	<u>Collieries</u>	<u>Auxiliary Department</u>	<u>Salaried Employees</u>	<u>Total</u>
60	24	4	2	30
61	13	1	2	16
62	17	3	2	22
63	12	4	4	20
64	15	6	1	22
65	13	3	1	17
66	8	3	8	19
67	8	—	3	11
68	6	2	2	10
69	6	1	1	8
70	4	2	3	9
71	5	2	1	8
72	1	1	1	3
73	1	—	1	2
77	—	1	—	1
78	—	—	1	1
<hr/>				
TOTAL	1189	217	164	1570

Appendix 12 Pg. 8



ANGUS, STONEHOUSE & CO. LTD
TORONTO, ONTARIO

ACADIA COAL
Age Distribution of Personnel Employed
At December 31, 1959

233

N u m b e r E m p l o y e d				
Age	Collieries	Auxiliary Departments	Salaried Employees	Total
22	1			1
23	3			3
24	1			1
25	2			2
26	6			6
27	6			6
28	5			5
29	6			6
30	4			4
31	6		1	7
32	9			9
33	3			3
34	7			7
35	10	1	2	13
36	10		1	11
37	5	1	2	8
38	11	1	3	15
39	12		1	13
40	11	2	3	16
41	15	2	1	18
42	13	2	1	16
43	11			11
44	9		1	10
45	15	3	2	20
46	10	1		11
47	11	1	3	15
48	12		1	13
49	13		4	17
50	15	1	3	19
51	15	2	3	20
52	13	3	1	17
53	8	3	2	13
54	10	1	1	12
55	19		1	20
56	8	1	1	10
57	8	1	1	10
58	15	1	1	17
59	4	1		5
60	6		1	7
61	10	1	3	14
62	2	2	3	7
63	5			5
64	6			6
65	3	3		6
66	2		1	3
67	2			2
68	3			3
70	1			1
71			1	1
TOTAL	382	34	50	466

Appendix 12 Pg. 9



DOMINION COAL COMPANY, LIMITED

234

MARITAL STATUS OF PERSONNEL EMPLOYED

AT DECEMBER 31, 1959

	<u>Married</u>	<u>Single</u>	<u>Total</u>
<u>COLLIERIES</u>	3,826	1,389	5,215
<u>AUXILIARY DEPARTMENTS</u>			
Shops	184	57	241
Construction	29	5	34
Transportation	9	2	11
Electrical	28	20	48
Property	20	6	26
New Waterford Construction	10	5	15
Warehouse	17	3	20
Piers	151	51	202
<u>TERMINALS</u>			
Montreal	54	15	69
Three Rivers	13	3	16
Halifax	8	1	9
<u>SALARIED EMPLOYEES</u>	689	147	836
<u>TOTAL</u>	5,038	1,704	6,742
<u>SYDNEY AND LOUISBURG</u>	341	71	412
<u>TOTAL</u>	5,379	1,775	7,154

Appendix 12 Pg. 10



OLD SYDNEY COLLIERIES

MARITAL STATUS OF PERSONNEL EMPLOYED

AT DECEMBER 31, 1959

	<u>Married</u>	<u>Single</u>	<u>Total</u>
<u>COLLIERIES</u>	1012	177	1189
<u>AUXILIARY DEPARTMENTS</u>			
Railway	21	—	21
Banking Station	18	13	31
Pier	51	2	53
Washplant	40	9	49
Mechanical and Electrical	50	13	63
<u>SALARIED EMPLOYEES</u>	148	16	164
<u>TOTAL</u>	<u>1340</u>	<u>230</u>	<u>1570</u>



ACADIA COAL

MARITAL STATUS OF PERSONNEL EMPLOYED

AT DECEMBER 31, 1959

	<u>Married</u>	<u>Single</u>	<u>Total</u>
<u>COLLIERY</u>	342	40	382
<u>AUXILIARY DEPARTMENTS</u>			
Washplant	7	2	9
Power Plant	3	—	3
Railway	9	—	9
Mechanical and Electrical	9	4	13
<u>SALARIED EMPLOYEES</u>	48	2	50
<u>TOTAL</u>	418	48	466



DOMINION COAL COMPANY, LIMITED

237

The average pay (both total and take home) by hour (for datal employee's)
day (for contract employee's), week month and year of Colliery and

Auxiliary Department employee's
(based on the year 1959)

	Average Hourly Pay	Average Daily Pay	AVERAGE WEEKLY PAY		AVERAGE MONTHLY PAY		AVERAGE YEARLY PAY	
			Total	Take Home	Total	Take Home	Total	Take Home
Colliery - datal	\$ 1.61	\$	\$ 69.55	\$ 55.26	\$ 243.42	\$ 193.41	\$ 3,092.27	\$ 2,492.09
Colliery - contract		19.52	87.84	73.55	307.44	257.43	3,860.45	\$ 3,260.27
Auxiliary Departments:								
Construction	1.56		68.45	53.69	296.61	232.65	3,559.30	2,791.78
Transportation	1.56		86.28	71.52	373.89	309.93	4,486.65	3,719.13
Electrical	1.70		63.55	48.79	275.40	211.44	3,304.83	2,537.31
Property	1.54		50.26	35.50	217.81	153.85	2,613.75	1,846.23
Shops	1.66		59.56	46.34	258.09	200.80	3,097.08	2,409.64
New Waterford	1.53		58.77	47.18	254.69	204.47	3,056.31	2,453.63
Construction								
Warehouse	1.49		53.95	39.19	233.79	169.83	2,805.50	2,037.98
International Pier	1.54		75.20	65.37	325.87	283.27	3,910.44	3,399.28
" - shippers		13.28	70.19	60.36	303.92	261.36	2,597.12	2,233.41
" - trimmers		14.11	77.30	67.47	334.71	292.15	2,860.04	2,496.33

NOTE:

- (1) Average incentive bonus included above
(2) The average monthly and yearly pay is adversely affected by the cutback in operations
at the collieries which amounted to an average of 43.1 days during the year 1959.



OLD SYDNEY COLLIERIES

238

The average pay (both total and take home) by hour (for datal employees)
day (for contract employees), week, month and year of Colliery and
Auxiliary Department Employee's
(based on the year - 1959)

	Average Hourly Pay	Average Daily Pay	AVERAGE WEEKLY PAY		AVERAGE MONTHLY PAY		AVERAGE YEARLY PAY	
			Total	Take Home	Total	Take Home	Total	Take Home
Colliery - datal	\$ 1.59	\$	\$ 65.99	\$ 52.75	\$ 241.96	\$ 193.41	\$ 3,068.97	\$ 2,486.41
Colliery - contract		17.73	86.88	73.64	318.56	270.01	3,988.13	3,405.57
Auxiliary Departments:								
Mechanical and electrical	1.65		66.97	52.05	290.23	225.58	3,482.83	2,706.99
Banking station	1.58		56.31	45.01	244.02	195.06	2,928.26	2,340.66
Wash plant	1.62		66.46	53.63	288.02	232.43	3,456.24	2,789.08
Railway	1.72		71.82	57.62	311.24	249.71	3,734.84	2,996.44
North Sydney Pier	1.74		49.46	38.52	214.31	166.91	2,571.74	2,002.86

NOTE: (1) Average incentive bonus included above.

(2) The average monthly and yearly pay is adversely affected by the cutback in operations
at the collieries which amounted to an average of 29.5 days during the year 1959.

Appendix No. 13 Pg. 2



ACADIA COAL

239

The average pay(both total and take home) by hour (for datal employees) day (for contract employees),
week, month and year of Colliery and
Auxiliary Department Employees
(based on the year - 1959)

	Average Hourly Pay	AVERAGE WEEKLY PAY		AVERAGE MONTHLY PAY		AVERAGE YEARLY PAY	
		Total	Take Home	Total	Take Home	Total	Take Home
Colliery - Datal	\$ 1.72	\$ 64.86	\$ 53.84	\$ 281.05	\$ 233.30	\$ 3,372.54	\$ 2,799.54
Auxiliary Departments							
Wash plant	1.58	67.06	57.45	290.58	248.96	3,486.97	2,987.53
Power plant	1.64	94.06	80.19	407.61	347.48	4,891.30	4,169.80
Railway	1.61	61.28	52.34	265.57	266.80	3,186.80	2,721.60
Mechanical and electrical	1.66	73.24	56.97	317.37	246.88	3,808.48	2,962.52

NOTE:

Average incentive bonus included above.

Appendix No. 13 Pg. 3



DOMINION COAL COMPANY, LIMITED

240

The average pay, by hour (for datal employees) day (for contract employees)
week, month and year by classification of mine labour based on the year 1959

CLASSIFICATION	Average Hourly Pay for Datal Employees	Average Daily Pay for Contract Employees	Average Weekly Pay	Average Monthly Pay	Average Yearly Pay
Surface					
Foreman and Clerks	1.52		66.88	234.08	2,980.13
Screening and Loading	1.48		65.12	277.92	2,906.21
Engine men	1.59		69.96	244.86	3,109.49
Firemen	1.56		68.64	240.24	3,054.05
Mechanics	1.59		69.96	244.86	3,109.49
Carpenters and Masons	1.54		67.76	237.16	3,017.09
Other Surface Labor	1.49		65.56	229.46	2,924.69
Underground					
Supervision	1.66		73.04	255.64	3,238.85
Horse Haulage - Datal	1.51		66.44	232.54	2,961.65
Horse Haulage - Contract		13.53	60.88	213.08	2,728.13
Mechanical Haulage-Datal	1.55		68.20	238.70	3,035.57
Mechanical Haulage-Contract		16.80	75.60	264.60	3,346.37
Stone Dusters	1.50		66.00	231.00	2,943.17
Pumpmen	1.57		69.08	241.78	3,072.53
Ventilation	1.55		68.20	238.70	3,035.57
Material Men	1.50		66.00	231.00	2,943.17
Roadmakers	1.64		72.16	252.56	3,201.89
Timbermen	1.62		72.16	252.56	3,201.89
Brushers - Datal	1.64		72.16	252.56	3,201.89
Brushers - Contract		22.39	100.75	352.63	4,402.67
Brushers, Archers-Longwall- Datal	1.64		72.16	252.56	3,201.89
Brushers, Archers-Longwall- Contract		23.51	105.80	370.30	4,614.77
Chock Builders and Drawers	1.58		69.52	243.32	3,091.01
Machine Attendants	1.59		69.96	244.86	3,109.49
Pipemen and Mechanics	1.61		70.84	247.94	3,146.45
Conveyor Movers	1.54		67.76	237.16	3,017.09
Electricians - Underground	1.57		69.08	241.78	3,072.53
Other Undg. Labour	1.50		66.00	231.00	2,943.17
Mining					
Mechanical	1.88		82.72	289.52	3,645.41
Rooms (contract)		18.11	81.50	285.25	3,594.17
Narrow Works (contract)		17.91	80.60	282.10	3,556.37
Longwall (contract)		17.25	77.62	271.67	3,431.21
Datal Mining	1.51		66.44	232.54	2,961.65

NOTE:

1. Average incentive bonus included above.
2. The average monthly and yearly pay is adversely affected by the cutback in operations at the Collieries which amounted to an average of 43.1 days during the year 1959.

Appendix 14 Pg. 1



OLD SYDNEY COLLIERIES

The average pay, by bonus (for datal employees) day (for contract employees)
week, month and year; by classification of mine labour based on the year 1959

CLASSIFICATION	Average Hourly pay for Datal Employees	Average Daily pay for Contract Employees	Average Weekly Pay	Average Monthly Pay	Average Yearly Pay
<u>Surface</u>					
Screening and Loading - Datal	1.47		61.74	226.38	2,881.97
Screening and Loading - Contract		13.88	68.01	249.37	3,157.85
Enginemen	1.58		66.36	243.32	3,085.25
Firemen	1.55		65.10	238.70	3,029.81
Mechanics	1.58		66.36	243.32	3,085.25
Carpenters and Masons	1.54		64.68	237.16	3,011.33
Other Surface Labour	1.48		62.16	227.92	2,900.45
<u>Underground</u>					
Supervision	1.64		68.88	252.56	3,196.13
Mechanical Haulage -Datal	1.50		63.00	231.00	2,937.41
Mechanical Haulage -Contract		14.84	72.72	266.64	3,365.09
Stone Dusters	1.48		62.16	227.92	2,900.45
Pumpmen	1.56		65.52	240.24	3,048.29
Ventilation	1.54		64.68	237.16	3,011.33
Material Men	1.48		62.16	227.92	2,900.45
Roadmakers	1.62		68.04	249.48	3,159.17
Timbermen	1.50		63.00	231.00	2,937.41
Brushers-Datdl	1.62		68.04	249.48	3,159.17
Brushers, Archers -Longwall- Datal	1.48		62.16	227.92	2,900.45
Brushers, Archers -Longwall- Contract		20.96	102.70	376.57	4,684.21
Chock Builders and Drawers	1.58		66.36	243.32	3,085.25
Machine Attendants	1.50		63.00	231.00	2,937.41
Pipemen and Mechanics	1.58		66.36	243.32	3,085.25
Conveyor Movers	1.52		63.84	234.08	2,974.37
Electricians-Ungrd.	1.55		65.10	238.70	3,029.81
Other Ungrd. Labour	1.48		62.16	227.92	2,900.45
<u>Mining</u>					
Mechanical	1.90		78.80	292.50	3,676.61
Narrow Works		17.06	83.59	306.50	3,843.37
Longwall		17.70	86.73	318.01	3,981.53

NOTE:

1. Average incentive bonus included above.
2. The average monthly and yearly pay is adversely affected by the cutback on operations at the Collieries, which amounted to an average of 29.5 days during the year 1959

Appendix 14 Pg. 2



ACADIA COAL

242

The average pay, by hour (for datal employees) day (for contract employees)
week, month and year by classification of mine labour based on the year 1959

<u>CLASSIFICATION</u>	<u>Average Hourly pay for Datal Employees</u>	<u>Average Daily pay for Contract Employees</u>	<u>Average Weekly Pay</u>	<u>Average Monthly Pay</u>	<u>Average Yearly Pay</u>
<u>Surface</u>					
Screening and Loading	1.55	-	58.90	255.23	3,062.80
Enginemen	1.66	-	63.08	273.35	3,280.16
Mechanics	1.67	-	63.46	274.99	3,299.92
Carpenters and Masons	1.63	-	61.94	268.41	3,220.88
Other Surface Labor	1.59	-	60.42	261.82	3,141.84
<u>Underground</u>					
Supervision	1.70	-	64.60	279.93	3,359.20
Mechanical Haulage	1.57	-	59.66	258.53	3,102.32
Stone Dusters	1.54	-	58.52	253.59	3,043.04
Pumpmen	1.61	-	61.18	265.11	3,181.36
Ventilation	1.61	-	61.18	265.11	3,181.36
Material men	1.54	-	58.52	253.59	3,043.04
Roadmakers	1.68	-	63.84	276.64	3,319.68
Timbermen	1.55	-	58.90	255.23	3,062.80
Brushers	1.68	-	63.84	276.64	3,319.68
Brushers, Archers-Longwall	1.68	-	63.84	276.64	3,319.68
Chock Builders and Drawers	1.65	-	62.70	271.70	3,260.40
Pipemen and Mechanics	1.64	-	62.32	270.05	3,240.64
Conveyor Movers	1.56	-	59.28	256.88	3,082.56
Other Underground Labour	1.54	-	58.52	253.59	3,043.04
<u>Mining</u>					
Datal Mining	1.96		74.48	322.75	3,872.96

NOTE:

Average incentive bonus included above.

Appendix 14 Pg. 3



COAL OPERATIONS

243

AGE DISTRIBUTION AND MARITAL STATUS OF MEN

EMPLOYED IN THE UNDERNOTED COLLIERIES

AT DECEMBER 31, 1959

<u>Age</u>	<u>Florence Colliery</u>	<u>Dominion No. 16 Colliery</u>	<u>Dominion No. 4 Colliery</u>	<u>TOTAL</u>
18		1	1	2
19	3	6	1	10
20	13	16	1	30
21	8	28		36
22	9	42	2	53
23	13	22	4	39
24	15	33	4	52
25	12	26	9	47
26	13	21	6	40
27	9	32	11	52
28	17	34	17	68
29	10	27	16	53
30	20	27	9	56
31	12	34	12	58
32	6	23	9	38
33	9	34	20	63
34	20	26	19	65
35	17	32	15	64
36	11	26	18	55
37	24	24	21	69
38	21	31	15	67
39	11	27	18	56
40	21	25	22	68
41	18	25	19	62
42	17	30	20	67
43	10	32	27	69
44	11	24	22	57
45	8	21	22	51
46	10	29	39	78
47	10	38	16	64
48	15	24	23	62
49	18	26	24	68
50	14	23	29	66
51	12	17	34	63
52	9	28	31	68

Appendix 15 Pg. 1



Age	Florence Colliery	Dominion No. 16 Colliery	Dominion No. 4 Colliery	TOTAL
53	12	17	26	55
54	6	24	27	57
55	10	17	28	55
56	9	20	21	50
57	7	11	22	40
58	11	19	12	42
59	8	18	13	39
60	10	14	24	48
61	8	8	6	22
62	7	5	11	23
63	9	14	12	35
64	5	6	17	28
65	8	6	10	24
66	7	7	5	19
67	7	5		12
68	4	4	1	9
69	4	1	2	7
70	3	3	1	7
71	4			4
72	1	1	1	3
73	1			1
74			2	2
75		2		2
TOTAL	587	1116	797	2500

MARITAL STATUS

Married	506	866	644	2016
Single	81	250	153	484
TOTAL	587	1116	797	2500



COAL TRANSPORTED BY WATER FROM THE STOWES
1946 - 1959
(Expressed in Net Tons)

245

Destination	1946 Tons	1947 Tons	1948 Tons	1949 Tons	1950 Tons	1951 Tons	1952 Tons	1953 Tons	1954 Tons	1955 Tons	1956 Tons	1957 Tons	1958 Tons	1959 Tons
Montreal, Que.	143,595	83,412	544,957	786,789	630,357	609,492	740,748	935,842	1,210,333	1,154,409	987,882	1,166,834	1,630,957	1,470,100
Quebec, Que.	84,430	112,435	280,059	317,365	403,765	408,920	425,425	222,429	228,195	222,122	146,343	187,935	149,205	156,001
Three Rivers, Que.	155,409	50,865	215,351	294,722	192,022	214,936	121,397	243,196	330,139	201,215	125,072	207,436	69,275	38,749
Chicoutimi, Que.	-	95,967	158,305	76,633	104,043	152,415	150,076	110,447	105,821	111,277	23,364	7,285	15,747	16,033
Port Alfred, Que.	-	38,628	180,772	89,033	50,191	69,426	80,365	31,644	105,606	50,348	62,335	72,309	-	-
Sorel, Que.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bay St. Pierre, Que.	-	-	2,135	438	331	279	406	310	311	199	310	-	-	3,277
Bellefleur, Que.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chandler, Que.	31,233	36,717	32,944	20,002	42,128	27,557	24,787	25,494	18,165	2,997	-	-	4,237	-
Clarke City, Que.	-	-	-	795	1,006	2,213	2,787	1,905	1,482	1,931	1,574	689	654	1,095
Seven Islands, Que.	-	-	-	-	-	-	239	-	-	-	-	-	-	-
Cap-Aux-Meules, Que.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. John's, Nfld.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leavesville, Nfld.	72,335	71,383	88,078	110,434	104,225	78,155	87,656	685	395	470	30,779	34,099	58,943	57,066
Bay Roberts, Nfld.	37,895	39,692	37,771	22,301	4,559	16,888	18,652	13,043	16,383	24,638	20,236	14,908	-	-
Labrador, Nfld.	7,830	12,152	7,571	8,347	8,320	9,270	9,270	10,117	10,117	9,236	8,889	8,987	7,817	9,565
Port-au-Port, Nfld.	28,070	42,544	23,296	26,502	30,437	9,681	24,874	15,761	24,006	17,239	19,827	23,852	15,822	18,368
Botwood, Nfld.	5,653	4,480	3,609	2,347	1,312	301	2,554	1,203	1,214	1,253	2,461	1,287	1,527	2,603
Cornerbrook, Nfld.	41,863	42,728	113,938	49,996	13,621	26,088	-	-	-	-	-	-	-	-
Argenteville, Nfld.	22,291	11,523	32,568	37,761	13,835	2,835	2,436	-	-	-	-	-	-	-
Clareville, Nfld.	6,403	21,288	-	-	-	-	-	-	-	-	-	-	-	-
Tellinville, Nfld.	-	-	678	-	-	-	-	-	-	-	-	-	-	-
Harbour Grace, Nfld.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbonear, Nfld.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Port Union, Nfld.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Pierre, Labrador	-	-	6,761	-	-	-	-	-	-	-	-	-	-	-
Hallifax, N.S.	4,398	6,383	-	-	-	-	-	-	-	-	-	-	-	-
Liverpool, N.S.	207,367	163,128	228,703	112,716	202,666	130,009	160,923	113,976	86,292	103,127	27,279	-	-	-
St. John, N.B.	29,072	26,466	35,473	17,821	26,866	14,548	-	-	-	-	-	-	-	-
United States	197,082	129,752	167,777	47,459	10,550	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South America	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1,075,736	1,019,540	2,220,843	2,111,684	1,892,565	1,816,222	1,729,289	1,821,534	2,100,749	2,192,907	1,695,896	1,730,671	1,954,195	1,761,886

(These figures do not include shipments by schooners)

Appendix No. 16

Traffic Department,
January 15, 1960



Coal Tonnage to St. Lawrence River Ports

By Owned, Time Chartered and Trip Charters 1950 - 1959 Inclusive

Year	Destination	Owned	Time Charter	Bare Boat Charter	Trip Charter	No. Trips	Total Net Tons
1950	Montreal	54,124	562,327	9,201	4,705	1	630,357
	Quebec	35,809	249,580	72,487	45,889	7	403,765
	Three Rivers	17,404	118,708	52,610	3,300	1	192,022
	Chicoutimi	-	4,549	99,494	-	-	104,043
	Port Alfred	-	45,595	4,596	-	-	50,191
	Chandler	-	12,008	-	30,120	9	42,128
	Clarke City	-	-	-	1,006	3	1,006
	Harve St. Pierre	-	-	-	331	1	331
	TOTAL	107,337	992,767	238,388	85,351	22	1,423,843
1951	Montreal	53,539	555,953	-	-	-	609,492
	Quebec	35,294	369,602	-	4,024	1	408,920
	Three Rivers	62,403	148,097	-	4,496	1	214,996
	Chicoutimi	-	147,789	4,626	-	-	152,415
	Port Alfred	9,172	60,254	-	-	-	69,426
	Chandler	-	-	-	27,557	8	27,557
	Clarke City	-	-	-	2,313	5	2,313
	Harve St. Pierre	-	-	-	279	1	279
	TOTAL	160,408	1,281,695	4,626	38,689	16	1,485,398
1952	Montreal	71,644	645,279	-	23,825	5	740,748
	Quebec	53,377	177,646	-	14,402	4	245,425
	Three Rivers	-	108,841	-	12,556	4	121,397
	Chicoutimi	-	135,986	-	14,090	4	150,076
	Port Alfred	9,190	71,175	-	-	-	80,365
	Chandler	-	-	-	24,787	7	24,787
	Clarke City	-	-	-	2,787	6	2,787
	Harve St. Pierre	-	-	-	406	1	406
	TOTAL	134,211	1,138,927	-	92,853	31	1,365,991



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Year	Destination	Owned	Time Charter	Bare Boat Charter	Trip Charter	No. Trips	Total Net Tons
1953	Montreal	126,400	765,835	-	43,607	5	935,842
	Quebec	-	191,817	-	40,602	6	232,419
	Three Rivers	45,049	181,369	-	21,778	3	248,196
	Chicoutimi	-	110,447	-	-	-	110,447
	Port Alfred	-	31,644	-	-	-	31,644
	Chandler	-	-	-	-	6	25,494
	Harve St. Pierre	-	-	-	-	1	310
	TOTAL	171,449	1,281,112	-	131,791	21	1,584,352
1954	Montreal	260,464	942,841	-	7,028	1	1,210,333
	Quebec	36,485	162,790	-	28,920	5	228,195
	Three Rivers	10,657	203,711	-	15,821	3	230,189
	Chicoutimi	-	105,851	-	-	1	105,851
	Port Alfred	21,052	84,554	-	-	-	105,606
	Chandler	-	-	-	18,165	5	18,165
	Harve St. Pierre	-	-	-	311	1	311
	TOTAL	328,658	1,499,747	-	70,245	15	1,898,650
1955	Montreal	272,954	877,785	-	3,670	1	1,154,409
	Quebec	-	209,052	-	13,070	3	222,122
	Three Rivers	19,150	167,982	-	14,083	2	201,215
	Chicoutimi	-	111,277	-	-	-	111,277
	Port Alfred	21,276	29,072	-	-	-	50,348
	Harve St. Pierre	-	-	-	199	1	199
	TOTAL	313,380	1,395,168	-	31,022	7	1,739,570
1956	Montreal	166,071	804,223	-	17,588	2	987,882
	Quebec	8,549	126,956	-	10,838	3	146,343
	Three Rivers	26,169	79,191	-	22,712	7	128,072
	Chicoutimi	-	23,364	-	-	-	23,364
	Port Alfred	21,273	41,062	-	-	-	62,335
	TOTAL	222,062	1,074,796	-	51,138	12	1,347,996

Appendix No. 17 Pg. 2



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<u>Year</u>	<u>Destination</u>	<u>Owned</u>	<u>Time Charter</u>	<u>Bare Boat Charter</u>	<u>Trip Charter</u>	<u>No. Trips</u>	<u>Total Net Tons</u>
1957	Montreal	45,548	993,457	-	127,829	22	1,166,834
	Quebec	-	165,594	-	22,391	4	187,985
	Three Rivers	36,178	163,221	-	8,037	3	207,436
	Chicoutimi	-	4,265	-	3,020	1	7,285
	Port Alfred	-	67,162	-	5,147	2	72,309
	TOTAL	81,726	1,393,699	-	166,424	32	1,641,849
1958	Montreal	689,178	932,535	-	9,244	1	1,630,957
	Quebec	3,966	141,203	-	4,036	1	149,205
	Three Rivers	10,000	54,709	-	4,566	1	69,275
	Chicoutimi	-	11,241	-	4,506	1	15,747
	Baie Comeau	-	4,237	-	-	-	4,237
	TOTAL	703,144	1,143,925	-	22,352	4	1,869,421
1959	Montreal	512,990	804,633	-	152,677	19	1,470,300
	Quebec	18,372	116,319	-	21,710	5	156,401
	Three Rivers	10,278	24,094	-	4,377	1	38,749
	Chicoutimi	-	16,033	-	-	-	16,033
	Sorel	-	3,277	-	-	-	3,277
	TOTAL	541,640	964,356	-	178,764	25	1,684,760

DOSCO, Sydney, N.S.
Traffic Department
January 18, 1960

Appendix No. 17 Pg. 3



STATEMENT OF WATER TONNAGE COAL
TO ST. LAWRENCE RIVER PORTS 1945-1949
INCLUSIVE

<u>YEAR</u>	<u>OWNED</u>	<u>OTHERS</u>	<u>TOTAL</u>
1945	6823	75694	82517
1946	91120	323548	414668
1947	31818	416210	448024
1948	11 2648	1301872	1414520
1949	36478	1549299	1585777

DOSCO, Montreal,
Traffic Department,
January 25, 1960.

Appendix No. 18



RAIL COAL

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Statement re - the Tonnages of Coal
shipped from Sydney and Sydney Mines
for years shown below (these rail
shipments include Coal to C.N.R.)

<u>Year</u>	<u>Central Canada</u>	<u>Maritime Points N. S. , N. B. , P. E. I.</u>	<u>Total</u>
1946	110,393	991,592	1,001,985
1947	25,780	334,423	360,203
1948	246,572	874,569	1,121,141
1949	288,747	685,079	973,826
1950	388,518	808,654	1,197,172
1951	330,726	715,772	1,046,498
1952	239,723	655,979	895,702
1953	231,664	630,094	861,758
1954	362,937	473,393	836,330
1955	425,787	487,416	913,203
1956	786,675	559,989	1,346,664
1957	596,365	711,249	1,307,614
1958	346,633	443,244	789,877
1959	480,198	654,405	1,134,603

January 21, 1960.

Appendix No. 19



TONNAGE TRANSHIPPED AT MONTREAL
FOR GREAT LAKES PORTS

	<u>1959</u>	<u>1958</u>
Cornwall	49,125	66,739
Oshawa	13,264	
Point Anne	89,022	100,986
Port Burwell	91,232	
Port Colborne	17,785	
Thorold	8,063	2,500
Picton	6,848	
Clarkson	4,950	
Toronto	39,700	25,246
Hamilton	9,050	2,650
Port Stanley	5,250	
Kingston	19,895	12,149
Cobourg	5,602	
Cardinal	<u>10,058</u>	<u> </u>
	369,844	210,270

DOSCO, Montreal,
Traffic Department,
January 25, 1960.

Appendix No. 20



BULKER RATES
FROM MONTREAL TO
LAKE PORTS

<u>PORTS</u>	<u>1959</u>
Port Burwell	1.80
Thorold	1.50
Toronto	1.50
Hamilton	1.50
Port Colborne	1.50
Port Stanley	2.00
Clarkson	1.95

DOSCO, Montreal,
Traffic Department,
January 25, 1960.

Appendix No. 22



ANGUS, STONEHOUSE & CO LTD
TORONTO, ONTARIO

SELF UNLOADER RATES FROM VARIOUS U.S. GREAT LAKES PORTS
TO VARIOUS ONTARIO GREAT LAKES PORTS
1948 VLS-A-VLS 1959

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	TORONTO/HAMILTON			OSHA/WA			PORT COLBORNE			KINGSTON			CORNWALL		
From	1948	1959	% Increase	1948	1959	% Increase	1948	1959	% Increase	1948	1959	% Increase	1948	1959	% Increase
Toledo	100	148	48%	103	155	51%	69	114	65%						
Sandusky	100	148	48%	103	155	51%	69	114	65%						
Huron	96	143	49%	100	146	46%	67	107	60%						
Loraine	96	143	49%	100	146	46%	67	107	60%						
Cleveland	94	134	43%	96	137	43%	57	98	72%						
Fairport	87	126	45%	89	129	45%	51	90	76%						
Ashabula	87	121	39%	89	125	40%	51	85	67%						
Conneaut	87	121	39%	89	125	40%	51	85	67%						
Erie	84	121	44%	86	125	45%	47	85	81%						
Buffalo	75	108	44%	76	110	45%	45	73	62%						
Charlotte	63	85	35%	63	94	49%				D. S.					
Sohus	63	85	35%	63	94	49%				64 86	98	53% D	122	200	64%
Oswego	63	85	35%	63	94	49%				64 86	98	53% D	122	200	64%

D - Deep
S - Shallow

DOSCO, Montreal,
Traffic Department,
January 22, 1960.



SELF UNLOADER RATES FROM VARIOUS U.S. GREAT LAKES PORTS
TO VARIOUS ONTARIO GREAT LAKES PORTS
1948 VIS-A-VIS 1959 2 55

	From	SARNIA		WINDSOR		PORT STANLEY		PORT BURWELL	
		1948	1959 %	Increase	1948	1959	% Increase	1948	1959 %
	Toledo	59	75½	28%	44	59	34%	60	90
	Sandusky	59	75½	28%	44	59	34%	60	90
	Huron	61	77½	27%	46	61	33%	58	87
	Loraine	61	77½	27%	46	61	33%	58	87
	Cleveland	64	80½	26%	49	64	31%	46	73
	Fairport	68	86½	27%	53	71	34%	43	70
	Ashtabula	71	89½	26%	56	74	32%	43	70
	Conneaut	71	89½	26%	56	74	32%	43	70
	Erie	71	89½	26%	56	74	32%	46	73
	Buffalo	71	89½	26%	56	74	32%	63	90
	Charlotte								
	Sodus								
	Oswego								

DOSCO, Montreal,
Traffic Department,
January 25, 1960.



BULKER FREIGHT RATES
FROM
VARIOUS U. S. GREAT LAKES PORTS
TO MONTREAL, THREE RIVERS AND QUEBEC
1946 VIS-A-VIS 1959

From	MONTREAL			THREE RIVERS			QUEBEC		
	1946	1959	% Increase	1946	1959	% Increase	1946	1959	% Increase
<u>Lake Erie</u>									
Ashtabula	135	215	59%	145	230	59%	155	250	61%
Conneaut	135	215	59%	145	230	59%	155	250	61%
Erie	135	215	59%	145	230	59%	155	250	61%
Fairport	150	215	43%	160	230	44%	170	260	47%
Toledo	150	240	60%	160	251	57%	170	270	59%
Sandusky	150	240	60%	160	251	57%	170	270	59%
Loraine	150	240	60%	160	251	57%	170	270	59%
Cleveland	150	240	60%	160	251	57%	170	270	59%
<u>Lake Ontario</u>									
Charlotte	100	175	75%	110	190	73%	120	215	79%
Sodus	100	175	75%	110	190	73%	120	215	79%
Oswego	100	175	75%	110	190	73%	120	215	79%

Above are quoted rates and do not include Seaway Tolls viz, 42 cents from Lake Erie
40 cents from Lake Ontario

DOSCO, Montreal,
Traffic Department
January 25, 1960.

Appendix No. 24



COMPARISON OF RAIL RATES ON BITUMINOUS COAL FROM CLEARFELD AND WESTMORLAND FIELDS TO GREAT LAKES PORTS
FOR TRANSHIPMENT BY WATER - CENTS PER TON OF 2,000 LBS.

	CLEARFELD			WESTMORLAND			AVERAGE RATE FROM THE TWO FIELDS	
	June 15/46 (1)	June 15/59 (2)	% Increase	June 15/46 (1)	June 15/59 (2)	% Increase	June 1/46	June 1/59
Ashtabula Harbor, Ohio.	183	330	80.3	176	322	82.9	179.5	326
Cleveland, Ohio.	233	386	65.6	176	322	82.9	204.5	354
Erie Docks, Pa.	183	330	80.3	176	322	82.9	179.5	326
SODUS POINT, N. Y.	188	313	66.4	213	338	58.6	290.5	325.5

(1) Plus dumping charge - At Sodus Point, N. Y. 10¢ per net ton - at other Lake Ports 11¢ per net ton

(2) Plus dumping charge of 18¢ per net ton.

DOSCO, Montreal,
Traffic Department,
January 21, 1960.

Appendix No. 25



COMPARISON OF ALL RAIL RATES ON BITUMINOUS COAL FROM CLEARFIELD AND WESTMORLAND FIELDS TO
ILLUSTRATIVE DESTINATIONS IN EASTERN CANADA. RATES IN CENTS PER TON OF 2,000 LBS.

	CLEARFIELD			WESTMORLAND			RATE AVERAGE FROM THE TWO FIELDS		
	Jan. 1/46	Jan. 1/60	% Increase	Jan. 1/46	Jan. 1/60	% Increase	Jan. 1/46	Jan. 1/60	
TO POINTS IN 70% SUBVENTION TERRITORY:									
Belleville, Ont.	(2) 384	(3) 699	82.0	(2) 399	(3) 714	78.9	391.5	766.5	
Camp Borden, Ont.	(2) 404	(3) 724	79.2	(2) 419	(3) 739	76.3	411.5	731.5	
Chalk River, Ont.		799			871			810	
Kingston, Ont.	(4) 725			(4) 747				726	
Kitchener, Ont.	(2) 374	(3) 684	82.8	(2) 389	(3) 699	79.6	381.5	691.5	
London, Ont.	(2) 374	(3) 684	82.8	(2) 389	(5) 669	77.1	381.5	686.5	
North Bay, Ont.	(2) 474	(3) 794	67.5	(2) 489	(3) 809	65.4	481.5	801.5	
Ottawa, Ont.	(1) 401.6	708	76.2	(1) 424.1	730	72.1	412.8	719	
Peterboro, Ont.	(2) 414	(3) 734	77.2	(2) 429	(3) 749	74.5	421.5	741.5	
Sudbury, Ont.	(2) 514	(3) 834	62.2	(2) 529	(3) 849	60.4	521.5	841.5	
Trenton, Ont.	(2) 384	(3) 699	82.0	(2) 399	(3) 714	78.9	391.5	766.5	
TO POINTS IN 55% SUBVENTION TERRITORY:									
Chibougamau, Que.		1006			1028			1017	
Drummondville, (1) Que.	458	764	67.	(1) 480.3	786	63.6	469.1	775	
Granby, Que.	(1) 455.3	762	67.4	(1) 475.8	784	64.7	465.5	773	
Montreal, Que.	(1) 410.7	717	74.5	(1) 433	739	70.6	421.8	728	



CLEARFIELD

WESTMORLAND

RATE AVERAGE FROM THE TWO FIELDS

TO POINTS IN 55% SUBVENTION TERRITORY: (Continued)

Jan. 1/46 Jan. 1/60 % Increase Jan. 1/46 Jan. 1/60 % Increase

Jan. 1/46 Jan. 1/60

Noranda, Que.

(1) 627.6 942 50.0 (1) 650 965 48.4 638.8 953.5

St. Hyacinthe, Que.

(1) 437.5 743 69.8 (1) 459.8 766 66.5 448.6 754.5

Shawinigan, Que.

(1) 452.6 762 68.3 (1) 475 784 65.0 463.8 773

Sherbrooke, Que.

(1) 464.2 770 65.8 (1) 486.6 793 62.9 475.4 781.5

Sorel, Que.

(1) 464.2 771 66.0 (1) 486.6 793 62.9 475.8 782

Thetford Mines, Que.

(1) 517.8 833 60.8 (1) 540.1 855 58.2 528.9 844

TO POINTS IN 35% SUBVENTION TERRITORY:

La Tuque, Que.

(1) 553.5 868 56.8 (1) 575.8 891 54.7 564.6 879.5

Quebec, Que.

(1) 508.9 821 61.3 (1) 531.2 843 58.6 520 832

(b) Ste. Anne de

Beaupre, Que. (1) 618.7 933 50.8 (1) 641 956 49.1 629.8 944.5

St. Felicien, Que.

(1) 616 931 51.1 (1) 638.3 953 49.3 627.1 942

Unless otherwise specified rates shown above are through rates published in PRR-3011-B, AA ICC2800.

(1) Published through rate per ton of 2,240 lbs. was reduced to rate per ton of 2,000 lbs. for comparison purposes.

Authority PRR-3011-A, AA ICC2500.

(2) Combination over Black Rock, N. Y. Authority PRR-3042-A, AA ICC 2526, GTR CC-27-2, ICC 276.

(3) Combination over Black Rock, N. Y. Authority PRR-3277, GTR CC-27-3, ICC 284.

(4) Combination over Ogdensburg, N. Y. Authority PRR-3011-B, AA ICC 2800; CPC Ferry 1-R; CPR E-220-B.

(5) Combination over Detroit, Michigan. Authority PRR-3262; GTW-341-M, ICC A-65.

(6) Intermediate to Baie St. Paul, Que.

DOSCO, Montreal,
Traffic Department,
January 25, 1960.



RATES ON BITUMINOUS COAL

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<u>TO</u>	<u>FROM</u>
	<u>CLEARFIELD</u> <u>WESTMORLAND</u>
Morcton, N.B.	1020 1042
Saint John, N.B.	987 1009
Fredericton, N.B.	987 1009
Woodstock, N.B.	987 1009
Edmundston, N.B.	949 971
Campbellton, N.B.	949 971
Chatham, N.B.	949 971
St. Stephen, N.B.	862 884
Bathurst, N.B.	949 971
Sussex, N.B.	1020 1042
New Castle, N.B.	993 1016
Gaspé, Que.	1074 1097
Perce, Que.	1074 (1) 1097 (1)
Paspebiac, Que.	1065 (2) 1077 (2)
Matapedia, Que.	949 971
Mont Joli, Que.	922 944
Riviere du Loup, Que.	877 899
Grand Falls, N.B.	993 (3) 1016 (3)
Oromocto, N.B.	1020 (4) 1042 (4)
Charlottetown, P.E.I.	1114 1136
Summerside, P.E.I.	1114 1136
Kensington, P.E.I.	1114 1136
Amherst, N.S.	1047 1069
Truro, N.S.	1105 1127
Halifax, N.S.	1132 1154
Yarmouth, N.S.	1234 1257
Middleton, N.S.	1185 1208

- (1) Intermediate to Gaspé, Que.
- (2) Intermediate to Chandler, Que.
- (3) Intermediate to Marysville, N.B.
- (4) Intermediate to Rothesay, N.B.

Tariff Authority - PRR 3011-B

DOSCO, Montreal,
Traffic Department
December 23, 1959

Appendix No. 27



STATEMENT COMPARING EX WATER RATES ON
BITUMINOUS COAL FROM AND TO POINTS NAMED
BELOW IN EFFECT IN 1946 WITH THOSE IN EFFECT
IN 1959 SHOWING ALSO THE AMOUNT OF INCREASE
AND THE PERCENTAGE INCREASE.

FROM	TO	Rate in Effect 1946	Rate in Effect 1959	Amount Of Increase	Percentage Of Increase
Three Rivers	Shawinigan	80	130	50	62.5%
	Grand'Mere	80	140	60	75 %
Quebec	Donncona	80	165	85	106.25%
	Beaupre	110	125	15	13.63%
Montreal	Ottawa	110	208	98	89.09%
	Hull	130	208	78	60 %
	Hawkesbury	100	225	125	125 %
	Gatineau	130	255	125	96.15%
	Sudbury	280	420	140	50 %
	North Bay	260	400	140	53.84%
	Cornwall	90	190	100	111.1%
	Peterborough	190	350	160	84.21%

DOSCO, Montreal,
Traffic Department,
January 15, 1960.

Appendix No. 28



COMPARATIVE STATEMENT OF RATES ON COAL FROM SYDNEY, N.S., EX SYDNEY AND LOUISBURG
RAILWAY COMPANY TO POINTS IN THE MARITIMES, QUEBEC AND ONTARIO, AS SHOWN BELOW,
STATEMENT SHOWS RATES AND SUBVENTION IN EFFECT IN THE YEAR 1946 AS COMPARED WITH
THE PRESENT RATES AND SUBVENTIONS APPLICABLE

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T o	Rate in		Subvention		Net Rate		Present		Subvention		Net Rate		Increase		Percentage	
	Effect	January	Jan. 1946	30%	January	1946	January	1960	January	1960	January	1960	1946 Rate	over	1946 Rate	over

70% Territory

London	Out.	5.85	1.76		4.09		6.48-1/2		4.54		1.94-1/2		0.63-1/2		11	
Camp Borden	Out.	-	-		-		6.19-1/2		4.34		1.85-1/2		-		-	
North Bay	Out.	-	-		-		5.99-1/2		4.20		1.79-1/2		-		-	
Sudbury	Out.	5.95	1.79		4.16		6.46-1/2		4.53		1.93-1/2		0.51-1/2		9	
Irenon	Out.	-	-		-		-		-		-		-		-	
Belleville	Out.	5.00	1.50		3.50		5.60-1/2		3.92		1.68-1/2		0.60-1/2		12	
Kinston	Out.	4.90	1.47		2.43		5.49-1/2		3.85		1.64-1/2		0.59-1/2		12	
Ottawa	Out.	4.60	1.38		3.22		5.20-1/2		3.64		1.56-1/2		0.60-1/2		13	
Kitchener	Out.	5.70	1.71		3.99		6.31-1/2		4.42		1.89-1/2		0.61-1/2		11	
Peterborough	Out.	5.10	1.53		3.57		5.72-1/2		4.01		1.71-1/2		0.62-1/2		12	
Chalk River	Out.	-	-		-		-		-		-		-		-	

55% Territory

Montreal	Que.	3.80	1.14		2.66		4.43-1/2		2.44		1.99-1/2		0.63-1/2		17	
Noranda	Que.	5.60	1.68		3.92		6.19-1/2		3.41		2.78-1/2		0.59-1/2		11	
Chibougamou	Que.	-	-		-		6.70-1/2		3.69		3.01-1/2		-		-	
Shawinigan	Que.	3.60	1.08		2.52		4.21-1/2		2.32		1.89-1/2		0.61-1/2		17	
St. Hyacinthe	Que.	3.70	1.11		2.59		4.32-1/2		2.38		1.94-1/2		0.62-1/2		17	
Shedrooke	Que.	3.70	1.11		2.59		4.32-1/2		2.38		1.94-1/2		0.62-1/2		17	
Dunsmuirville	Que.	3.60	1.08		2.52		4.21-1/2		2.32		1.89-1/2		0.61-1/2		17	
Thetford Mines	Que.	4.20	1.26		2.94		4.74-1/2		2.61		2.13-1/2		0.54-1/2		13	
Granby	Que.	3.90	1.17		2.73		4.52-1/2		2.49		2.03-1/2		0.62-1/2		16	
Sorel	Que.	3.80	1.14		2.66		4.41-1/2		2.43		1.98-1/2		0.61-1/2		16	

35% Territory

St. Felicien	Que.	-	-		-		5.09-1/2		1.78		3.31-1/2		-		-	
Quebec	Que.	3.20	0.96		2.24		4.82		1.62		3.18		1.62		51	
La Tuque	Que.	4.05	1.22		2.83		4.63-1/2		1.62		3.01-1/2		0.58-1/2		14	
Ste. Anne de Beaupre Que.		4.80	1.44		3.36		4.67-1/2		1.64		3.03-1/2		-		-	

Maritime Territory

Truro	N.S.	1.50	-		-		2.38		-		-		0.88		59	
Halifax	N.S.	1.60	-		-		2.48		-		-		0.88		55	
Yarmouth	N.S.	2.40	-		-		3.36		-		-		0.96		40	
Amerst	N.S.	1.80	-		-		2.76		-		-		0.96		53	
Moncton	N.S.	2.00	-		-		2.96		-		-		0.96		48	
Saint John	N.B.	1.90	-		-		2.86		-		-		0.96		50	
Woodstock	N.B.	2.50	-		-		3.46		-		-		0.96		38	
Bathurst	N.B.	2.00	-		-		2.96		-		-		0.96		48	
Charlottetown	P.E.I.	2.10	-		-		3.05		-		-		0.96		46	

Traffic and Transportation Department,
Sydney, N.S.
January 18, 1960.

Appendix No. 30



ANGUS, STONEHOUSE & CO. LTD
TORONTO, ONTARIO

COMPARATIVE STATEMENT OF RATES ON COAL FROM SYDNEY MINES, N.S.
TO POINTS IN THE MARITIMES, QUEBEC AND ONTARIO, AS SHOWN BELOW.
STATEMENT SHOWS RATES AND SUBVENTION IN EFFECT IN THE YEAR 1946
AS COMPARED WITH THE PRESENT RATES AND SUBVENTION APPLICABLE

26 A

To	Rate in Effect Jan. 1946	Subvention 30% Jan. 1946	Net Rate Jan. 1946	Present Rate Jan. 1960	Subvention Jan. 1960	Net Rate Jan. 1960	Increase 1960 Over 1946 Rate	% of Increase 1960 over 1946 Rate
70% Territory								
London	Ont.	5.85	1.76	4.09	6.64	4.65	1.99	79
Camp Borden	Ont.	-	-	-	6.35	4.45	1.90	-
North Bay	Ont.	-	-	-	6.15	4.31	1.84	-
Sudbury	Ont.	5.95	1.79	4.16	6.62	4.63	1.99	67
Irenon	Ont.	-	-	-	-	-	-	-
Belleville	Ont.	5.00	1.50	3.50	5.76	4.03	1.73	76
Kingston	Ont.	4.90	1.47	3.43	5.65	3.96	1.69	75
Ottawa	Ont.	4.60	1.38	3.22	5.36	3.75	1.61	76
Kitchener	Ont.	5.70	1.71	3.99	6.47	4.53	1.94	77
Peterborough	Ont.	5.10	1.53	3.57	5.88	4.12	1.76	78
Chalk River	Ont.	-	-	-	-	-	-	-
55% Territory								
Montreal	Que.	3.80	1.14	2.66	4.59	2.52	2.07	79
Noranda	Que.	5.60	1.68	3.92	6.35	3.49	2.86	75
Chibougamou	Que.	-	-	-	6.86	3.77	3.09	-
Shawmigan	Que.	3.60	1.08	2.52	4.37	2.40	1.99	77
St. Hyacinthe	Que.	3.70	1.11	2.59	4.48	2.46	2.02	78
Sherbrooke	Que.	3.70	1.11	2.59	4.48	2.46	2.02	78
Drummondville	Que.	3.60	1.08	2.52	4.37	2.40	1.97	77
Thetford Mines	Que.	4.20	1.26	2.94	4.90	2.70	2.20	79
Granby	Que.	3.90	1.17	2.73	4.68	2.57	2.11	78
Sorel	Que.	3.80	1.14	2.66	4.57	2.51	2.06	77
35% Territory								
St. Felicien	Que.	-	-	-	-	-	-	-
Quebec	Que.	3.20	.96	2.24	3.97-1/2	1.39	2.58-1/2	77-1/2
Latugue	Que.	4.05	1.22	2.83	4.79	1.68	3.11	74
St. Anne de Beaupre	Que.	4.80	1.44	3.36	4.81	1.68	3.13	.01
Maritime Territory								
Turo	N.S.	1.50	-	-	2.53-1/2	-	1.03-1/2	69
Halifax	N.S.	1.60	-	-	2.67-1/2	-	1.07-1/2	67
Yarmouth	N.S.	2.40	-	-	3.51-1/2	-	1.11-1/2	46
Amherst	N.S.	1.80	-	-	2.91-1/2	-	1.11-1/2	62
Moncton	N.B.	2.00	-	-	3.11-1/2	-	1.11-1/2	56
Saint John	N.B.	1.90	-	-	3.01-1/2	-	1.11-1/2	59
Woodstock	N.B.	2.50	-	-	3.61-1/2	-	1.11-1/2	45
Bathurst	N.B.	2.00	-	-	3.11-1/2	-	1.11-1/2	53
Charlottetown	P.E.I.	2.10	-	-	3.21-1/2	-	1.11-1/2	56

Traffic and Transportation Department
Sydney, N.S., January 18th, 1960

Appendix No. 29



STATEMENT SHOWING HISTORY OF INCREASES ON BITUMINOUS
COAL FREIGHT RATES AS AUTHORIZED BY THE BOARD OF
TRANSPORT COMMISSIONERS, ALSO INCREASES APPLICABLE
ON COAL TRAFFIC MOVING WITHIN THE SELECT TERRITORY
AND ON COAL TRAFFIC MOVING FROM SELECT TERRITORY TO
DESTINATIONS WEST OF LEVIS AND DIAMOND, QUEBEC.

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Date of Increase	C.F.A. Tariff No.	Board's Order No. and Date.	Normal Increase Authorized	M.F.R.A. Increase within Territory	M.F.R.A. Increase to west of Levis & Diamond
April 8/48	71	70425 March 30, 1948	25	20	22
Oct. 11/49	72	73123 Sept. 24, 1949	8	6½	7
March 23/50	72-A in lieu of 72	74034 March 1, 1950	15	12	13
June 16/50	72-B in lieu of 72-A	74512 May 25, 1950	-(15)	-(12)	-(13)
July 26/51	74	76886 July 4, 1951	10 15 20	8 12 16	9 13 18
Feb. 11/52	74-A in lieu of 74	78164 Jan. 25, 1952	- (10) - (15) - (20)	- (8) - (12) - (16)	- (9) - (12) - (16)
Rates up to \$1.00					
Rates \$1.00 to \$2.00					
Rates \$2.01 and over					
Rates up to \$1.00					
Rates \$1.00 to \$2.00					
Rates \$2.01 and over					



Date of Increase		C. F. A. Tariff No.	Board's Order No. and Date	Normal Increase Authorized		M. F. R. A. Increase within territory	M. F. R. A. Increase to west of Lewis and Diamond
Jan. 1/53	74-B in lieu of 74-A	80462	Dec. 20, 1952	20	16	18	22
		Rates up to \$0.90		25	20	22	26
		Rates \$0.91 to \$1.00		30	24	26	31
		Rates \$1.01 to \$1/85		35	28	31	35
		Rates \$1.86 to \$2.00		40	32	35	
		Rates \$2.01 and over					
March 16/53	74-C in lieu of 74-B	80965	March 6, 1953	30	24	26	31
		Rates up to \$0.80		35	28	31	35
		Rates \$0.81 to \$0.84		35	28	31	35
		Rates \$0.85 to \$0.90		40	32	35	40
		Rates \$0.91 and \$0.92		45	36	40	44
		Rates \$0.93 to \$1.00		50	40	44	48
		Rates \$1.01 to \$1.70		50	40	48	53
		Rates \$1.71 to \$1.76		55	44		
		Rates \$1.77 to \$1.85		55	44		
		Rates \$1.86 to \$1.88		60	48		
		Rates \$1.89 to \$2.00					
		Rates \$2.01 and over					
July 3/56	83	89030	June 18, 1956	12	10	11	
Jan. 1/57	83-A in lieu of 83	90447	Dec. 17, 1956	18	14	16	
July 1/57	-	M. F. R. A. Adjustment		-	-	15 in lieu of 16	



<u>Date of Increase</u>	<u>C.F.A. Tariff No.</u>	<u>Board's Order No. and Date</u>	<u>Normal Increase Authorized</u>	<u>M.F.R.A. Increase within Territory</u>	<u>M.F.R.A. Increase to west of Levis and Diamond</u>
Jan. 15/58	83-B in lieu of 83-A	93265 Dec. 27, 1957	25*	20*	21*
Postponed until March 1/58		Order-in-Council P.C. 1958-24 Jan. 7, 1958			
Postponed May 1/58		Order-in-Council P.C. 1958-305 Feb. 26, 1958			
Cancelled April 30/58 restored	83-A	Order-in-Council P.C. 1958-601 April 29, 1958			
Dec. 1/58	84	96300 Nov. 17, 1958	22	17½	18
Aug. 1/59	84-A in lieu of 84	96300 Nov. 17, 1958 and 98424 July 10, 1959	- (22)	- (17½)	- (18)

*Cancelled April 30, 1958.

DOSCO, Montreal,
Traffic Department,
January 19, 1960.



Industrial & Domestic
STATEMENT SHOWING SOME COAL
ACCOUNTS DISPLACED BY OIL 266

Region	Account	Annual Tonnage Displaced	
Newfoundland	Anglo-Nfld. Development Co. Ltd.	100,000	
	Bowaters Limited	125,000	
	Buchans Mining Co. Ltd.	14,000	239,000
Nova Scotia	Nova Scotia Light & Power Co. Ltd.	50,000	
	Mersey Paper Co. Ltd.	80,000	
	L.E. Shaw Ltd.	10,000	
	Misc. Small Industry - Estimated	200,000	340,000
New Brunswick	Atlantic Sugar Refinery	50,000	
	Irving Pulp and Paper	15,000	
	St. John General	8,000	
	T. Eaton Co. Ltd.	2,500	
	Swift Canadian Co. Ltd.	3,500	
	L.E. Shaw Ltd. Chipman	10,000	
	Misc. Small Industry - Estimated	200,000	289,000
Pr. Ed. Island	Maritime Electric Co. Ltd.	40,000	
	Misc. Small Industry - Estimated	10,000	50,000
Quebec	Anglo Canadian Pulp & Paper	125,000	
	St. Lawrence Corporation	80,000	
	Gaspesia Sulphite	80,000	
	Consolidated Paper - Cape Mill	50,000	
	Canadian International Paper	150,000	
	Canadian Celanese Ltd.	60,000	
	Canadian Johns-Manville Co. Ltd.	25,000	
	St. Malo Heating	12,000	
	Montreal Locomotive Works	20,000	
	Dominion Oilcloth	10,000	
	Glass Companies - Montreal	28,000	
	Canadian Car Co. Ltd.	8,000	
	Chateau Frontenac, Quebec	6,000	
	Miscellaneous Industry, etc.	300,000	954,000
Railways	C.N.R.	1,300,000	
	C.P.R.	235,000	
	D.A.R.	35,000	
	Newfoundland Railway	100,000	1,670,000
TOTAL:			3,542,000

Montreal, October 1, 1959.

Note: A small amount of this tonnage was British coal but was a potential for our coal.

Appendix 32



DELIVERIES OF PETROLEUM FUELS
AS REPORTED BY REFINERS AND DISTRIBUTORS - CALENDAR YEARS
PER BARRELS OF 35 IMPERIAL GALLONS
267

Year	Location	For Heating Homes and Buildings and for Lighting and Cooking	To Electric Light Plants	For Industrial Purposes as Fuel or Matl.	For Tractors & other Motor Vehicles	To Railways	Ships and Boats as Fuel	Unspecified Uses	Total Deliveries
1950	Atlantic Provinces	2,388,035	190,073	1,396,199	111,224	512,764	1,778,578	66,371	6,443,244
1950	Quebec	8,211,508	18,984	3,831,983	259,660	327,379	3,234,511	63,550	15,947,575
1951	Atlantic Provinces	2,552,183	139,070	2,013,749	240,837	758,381	2,022,865	7,334	7,734,419
1951	Quebec	9,154,527	8,227	4,869,174	393,251	504,868	3,248,058	96,496	18,274,601
1952	Atlantic Provinces	3,072,722	87,956	2,042,808	347,942	881,415	2,239,040	125,055	8,796,938
1952	Quebec	10,232,680	13,164	5,417,298	470,676	576,006	3,987,350	150,384	20,847,558
1953	Atlantic Provinces	3,349,110	115,057	1,888,943	271,998	856,393	2,249,513	116,193	8,847,207
1953	Quebec	11,137,646	41,648	6,936,734	531,955	610,450	3,821,310	380,994	23,460,737
1954	Atlantic Provinces	3,857,753	119,490	2,682,213	420,108	774,874	1,936,404	42,451	9,833,293
1954	Quebec	13,900,570	34,649	8,067,435	860,396	858,948	3,392,445	538,498	27,652,941
1955	Atlantic Provinces	4,767,348	146,022	3,138,720	286,297	1,010,039	2,082,488	83,203	11,514,117
1955	Quebec	15,286,150	45,336	10,034,563	722,629	1,109,240	3,511,274	696,915	31,406,107
1956	Atlantic Provinces	5,766,216	564,535	3,375,079	181,299	1,214,663	1,908,001	181,865	13,191,658
1956	Quebec	17,161,209	19,476	11,439,397	986,852	1,402,111	4,080,015	258,002	35,348,062
1957	Atlantic Provinces	5,729,375	422,304	3,936,010	189,954	1,083,102	3,073,405	38,445	14,472,595
1957	Quebec	18,080,732	171,969	10,362,176	1,051,635	1,675,271	4,658,405	949,708	36,949,896
1958	Atlantic Provinces	6,686,451	Included in D. B. S.	3,723,143	212,180	1,197,537	2,773,085	24,126	14,616,522
1958	Quebec	21,709,928	by D. B. S.	11,349,622	803,220	2,078,205	3,890,938	659,109	40,491,022

Note: Fuel consumption in oil refinery boilers is not included.
This has not been reported by D.B.S. since 1952.

Appendix No. 33

Montreal, November 23, 1959.



ACCOUNTS WHICH HAVE CONVERTED OR MAY
CONVERT TO NATURAL GAS IN THE AREA 268
SERVED BY NOVA SCOTIA COAL

<u>Customer</u>	<u>Location</u>	<u>Tonnage</u>	<u>Remarks</u>
Quebec:			
Dominion Engineering	Lachine	3,000	Direct loss to coal
Canada & Dominion Sugar	Montreal	45,000	Direct loss to coal
Suburban Enterprises	Norgate	7,000	Direct loss to coal
Canada Cement Company	Hull	50,000	Direct loss to coal
Westmount Realities	Montreal	7,000	Direct loss to coal
St. Luc Hospital	Montreal	-	Oil to gas
Dominion Glass Company	Montreal	-	Oil to gas
Pilkington Glass	Montreal	-	Oil to gas
Pittsburg Glass	Montreal	-	Oil to gas
Consumers Glass	Montreal	-	Oil to gas
Miron Freres	Montreal	-	Prospective Tonnage
		112,000	150,000
Other Accounts Approached to Convert:			
Canadian Internl. Paper	Gatineau	220,000	
Canadian Internl. Paper	Temiskamg.	70,000	290,000
Quebec Total:		402,000	
Ontario:			
Canada Starch Co.	Cardinal	35,000	Direct loss to coal
Carnation Company	Alexandria	2,000	Direct loss to coal
Dupont Co. Limited	Maitland	60,000	Direct loss to coal
Dept. of Def. Production	Cp. Borden	7,500	Direct loss to coal
Can. Cement Company	Pt. Colborne	25,000	Direct loss to coal
		129,500	
Other Accounts Approached to Convert:			
Canada Cement Co.	Pt. Anne	100,000	
Canada Cement Co.	Woodstock	100,000	
Can. Internl. Paper	Hwksbury	40,000	240,000
Ontario Total:		369,500	
Grand Total:		771,500 tons.	



ACCOUNTS IN THE ST. LAWRENCE AREA UTILIZING
SURPLUS ELECTRIC POWER FOR STEAM PURPOSES,
WITH RESULTANT DECREASE IN COAL REQUIREMENTS.

<u>Customer</u>	<u>Location</u>	<u>Actual 1956/57</u>	<u>Estimated 1959/60</u>	<u>Estimated Tonnage Displaced by Electricity</u>
Consolidated Paper	Shawinigan	73,000	10,000	63,000
Consolidated Paper	Grand' Mere	58,000	5,000	53,000
Consolidated Paper	Three Rivers	48,000	20,000	28,000
Consolidated Paper	Port Alfred	39,000	-	39,000
DuPont Co.	Shawinigan	32,000	20,000	12,000
Shaw. Chemicals	Shawinigan	24,000	5,000	19,000
Price Bros.	Riverbend	82,000	15,000	67,000
St. Lawrence Corp.	Dolbeau	48,000	-	48,000
Aluminum Co.	Arvida	25,000	-	25,000
Can. Int. Paper	La Tuque	96,000	20,000	76,000
Jos. MacLaren	Buckingham	25,000	-	25,000
Donnacona Paper	Donnacona	81,000	40,000	41,000
St. Anne Paper	Beaupre	51,000	15,000	36,000
		682,000	150,000	532,000

Note: The 532,000 tons shown above could be reduced by about 75,000 tons to four accounts burning Minto and other coals offered at prices below those of Dominion Coal Company, Limited.

Montreal, October 1, 1959.

Appendix No. 35



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

270

To shipments by rail from St. Lawrence Terminals to destinations in the
Province of Quebec:

<u>Effective Date</u>	<u>Assistance</u>
Trial - Sept. 2, 1924 to	
March 31, 1925	1/5¢ per ton per mile; max. 50¢ per ton
March 30, 1928	1/5¢ per ton per mile; max. 75¢ per ton
June 1, 1931	No change in rate but Cornwall and Ottawa included
May 9, 1932	No change in rate but Cornwall and Ottawa excluded
August 4, 1936	Assistance cancelled
May 1, 1948	Up to \$1.75 per net ton
April 1, 1958	Up to \$2.25 per net ton
April 23, 1959	Up to \$2.75 per net ton

To shipments by rail from St. Lawrence Terminals to destinations in the
Province of Ontario:

<u>Effective Date</u>	<u>Assistance</u>
Trial - Sept. 2, 1924 to	
March 31, 1925	1/5¢ per ton per mile; max. 50¢ per ton
March 30, 1928	1/5¢ per ton per mile; max. 75¢ per ton
June 1, 1931	1/3¢ per ton per mile; max. \$1.50 per ton
May 9, 1932	No change in rate but Cornwall and Ottawa included
May 28, 1934	No change in rate but Hull included
Nov. 8, 1938	4.5 mills per ton per mile; max. \$2 per net ton
May 22, 1939	Temiskaming and Gatineau added
Dec. 5, 1939	1/3¢ per ton per mile; max. \$1.50 per net ton
April 1, 1940	The difference in amount per net ton between the laid down cost of N.S. coal and the U.S. coal to a maximum of \$2 per net ton.
Feb. 26, 1948	1/3¢ per ton per mile; max. \$1.50 per net ton
April 1, 1952	Assistance expired
May 15, 1953	Up to \$1.75 per net ton
April 1, 1958	Up to \$2.25 per net ton
April 23, 1959	Up to \$4.50 per net ton



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

271

To shipments by water from St. Lawrence Terminals to destinations in the Province of Quebec west of Montreal:

<u>Effective Date</u>	<u>Assistance</u>
May 9, 1932	\$1.00 per net ton
March 3, 1934	\$1.00 per net ton but not to exceed assistance provided for rail shipments ex St. Lawrence Terminals
August 4, 1936	Assistance cancelled
February 26, 1948	1/3¢ per ton per mile; max. \$1.50 per net ton
May 15, 1953	Up to \$1.75 per net ton
April 1, 1958	Up to \$2.25 per net ton
April 23, 1959	Up to \$2.75 per net ton

To shipments by water from St. Lawrence Terminals to destinations in the Province of Ontario:

<u>Effective Date</u>	<u>Assistance</u>
May 9, 1932	\$1.00 per net ton
March 3, 1934	\$1.00 per net ton but not to exceed assistance provided for rail shipments ex St. Lawrence Terminals
May 28, 1934	Hull now included
August 4, 1936	1/3¢ per ton per mile; max. \$1.50 per net ton
November 8, 1938	4.5 mills per ton per mile; max. \$2 per net ton
May 22, 1939	Temiskaming and Gatineau added
December 5, 1939	1/3¢ per ton per mile; max. \$1.50 per net ton
April 1, 1940	The difference in amount per net ton between the laid down cost of N.S. coal and the U.S. coal to a maximum of \$2 per net ton
February 26, 1948	1/3¢ per ton per mile; max. \$1.50 per net ton
April 1, 1952	Assistance cancelled
May 15, 1953	Up to \$1.75 per net ton
April 1, 1958	Up to \$2.25 per net ton; special assistance up to \$2.80 per net ton on 100,000 tons for Point Anne
April 23, 1959	Up to \$4.50 per net ton

Appendix 36 Pg. 2



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

272

To all rail shipments to Province of Quebec:

Effective Date

Assistance

Trial - Sept. 2, 1924 to

March 31, 1925

March 30, 1928

June 1, 1931

July 28, 1932

April 1, 1935

August 4, 1936

April 1, 1940

February 26, 1948

April 1, 1949

December 1, 1949

April 1, 1952

April 1, 1958

April 23, 1959

1/5¢ per ton per mile; max. 50¢ per ton

Maximum rail freight rate \$3 per ton winter only

1/7¢ per ton per mile; max. \$2. per ton - Nov. 15
to April 15 each year

Rates extended to all year round

Difference between cost of N.S. and imported coal
up to a maximum \$2 per ton

30% reduction of the freight rate; no maximum,
Levis and Quebec west

The difference in amount per net ton between the laid
down cost of N.S. coal and the U.S. coal to a
maximum of \$2 per net ton

30% of the freight rate

Increased to 50% with maximum \$2.50 per net ton
for period April 1 to September 30, 1949

30% of the freight rate

45% of the freight rate; max. \$2.50 per net ton

60% of the freight rate; max. \$4.50 per net ton to
points in Ontario and Quebec in the districts of
Temiskaming, Pontiac, Gatineau, Papineau and
Argenteuil;

25% of the freight rate to points in Quebec in the
districts of Charlevoix, Chicoutimi, Jonquiere-
Kenogami, Lac St. Jean and Roberval;

35% of the freight rate to points in Quebec in the
districts of Montmorency, Quebec, Portneuf and
Laviolette;

45% of the freight rate to points in Quebec in
districts other than those named above, excluding
points east of Levis.

70% of the freight rate; max. \$5 per net ton to
points in Ontario and Quebec in the districts of
Temiskaming, Pontiac, Gatineau, Papineau and
Argenteuil,

35% of the freight rate to points in Quebec in the
districts of Charlevoix, Chicoutimi, Jonquiere-
Kenogami, Lac St. Jean and Roberval; Montmorency
Quebec, Portneuf and Laviolette;

55% of the freight rate to points in Quebec in districts
other than those named above, excluding points east
of Levis.

Appendix 36 Pg. 3



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

273

To all rail shipments to Province of Ontario:

Effective Date

Assistance

Trial - Sept. 2, 1924 to

March 31, 1925

March 30, 1928

June 1, 1931

July 28, 1932

August 4, 1936

November 8, 1938

December 5, 1939

April 1, 1940

February 26, 1948

April 1, 1952

April 1, 1958

1/5¢ per ton per mile; max. 50¢ per ton

Assistance cancelled

1/7¢ per ton per mile; max. \$2 per ton, Nov. 15
to April 15 each year

Rate extended to all year round

1/7¢ per ton per mile; max. \$1.50 per net ton
including Hull, Quebec

1/7¢ per ton per mile; max. \$2 per net ton including
Hull, Quebec

1/7¢ per ton per mile; max. \$1.50 per net ton

The difference in amount per net ton between the
laid down cost of N.S. coal and the U.S. coal to a
maximum of \$2 per net ton

1/7¢ per ton mile; max. \$1.50 per net ton

45% of the freight rate; max. \$2.50 per net ton

60% of the freight rate; max. \$4.50 per net ton to
points in Ontario and Quebec in the districts of
Temiskaming, Pontiac, Gatineau, Papineau and
Argenteuil;

25% of the freight rate to points in Quebec in the
districts of Charlevoix, Chicoutimi, Jonquiere-
Kenogami, Lac St. Jean and Roberval;

35% of the freight rate to points in Quebec in the
districts of Montmorency, Quebec, Portneuf and
Laviolette;

45% of the freight rate to points in Quebec in
districts other than those named above, excluding
points east of Levis.

April 23, 1959

70% of the freight rate; max. \$5 per net ton to
points in Ontario and Quebec in the districts of
Temiskaming, Pontiac, Gatineau, Papineau and
Argenteuil;

35% of the freight rate to points in Quebec in the
districts of Charlevoix, Chicoutimi, Jonquiere-
Kenogami, Lac St. Jean and Roberval; Montmorency
Quebec, Portneuf and Laviolette;

55% of the freight rate to points in Quebec in districts
other than those named above, excluding points east
of Levis.



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

274

Railway coal (locomotive coal consumed by the railways in Quebec and in Ontario): -

<u>Effective Date</u>	<u>Assistance</u>
June 1, 1931	Same rates as industrial coal applicable to any increased tonnage of Canadian coal used over and above average consumption in 1928, 29 & 30.
May 9, 1932	Difference in cost of imported and Maritime Provinces coal up to a maximum of \$2 per net ton.
April 4, 1933	Maximum increased to \$2.50 per net ton
May 28, 1934	Maximum reduced to \$2.00 per net ton
November 8, 1938	Maximum increased to \$2.50 per net ton
December 5, 1939	No change in rate but Province of Quebec eliminated
October 1, 1940	Rail shipments to Levis under subvention assistance up to \$1.50 per net ton. Assistance also made available on shipments to Montreal Terminals for coal moved via Portland and Searsport up to 75¢ per net ton.
November 1, 1941	Rail coal for consumption in the Province of Quebec shipped via Portland or Searsport, the difference per net ton between laid down cost of N.S. coal and laid down cost of imported coal up to \$2.00 per net ton
February 26, 1948	Up to \$2.50 per net ton
April 1, 1952	Up to \$3.00 per net ton
April 1, 1954	Up to \$4.00 per net ton for use in New Brunswick, Quebec and Ontario

Shipments via Portland or Searsport: -

<u>Effective Date</u>	<u>Assistance</u>
November 1, 1941	The difference in amount per net ton between the laid down cost of N.S. coal and imported coal up to \$2.00 per net ton
1944	No longer applicable



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

275

Coal transported in chartered vessels from Nova Scotia to ports in the
Province of Quebec:

Effective Date

Assistance

April 15, 1941	\$1.00 per net ton; April 15, 1941 to Dec. 31, 1941
May 1, 1942	Expired
1944, 1945 & 1946	Difference in weighted average transportation cost per ton for season 1940 and current season
August 15 to Dec. 31, 1947	Up to \$1.00 per net ton
February 26, 1948	Up to \$1.50 per net ton
April 1, 1949	Up to \$2.00 per net ton
April 1, 1952	Maximum increased to \$3.00 per net ton
April 1, 1958	No change but flat rate \$3 per ton applicable when coal transshipped for delivery to Ontario and points in Quebec west of Montreal
April 23, 1959	Up to \$4.50 per net ton but not less than \$3.25 for coal transshipped for delivery to Ontario and points in Quebec west of Montreal

Shipments via Pointe du Chene, Industrial coal:

Effective Date

Assistance

August 1, 1942	The difference in amount per net ton between the laid down cost of Cape Breton coal and the lesser of the laid down costs of imported coal or Canadian coal delivered by other customary routings up to a maximum of \$2.50 per net ton.
1944, 1945 & 1946	No longer applicable

Shipments via Pointe du Chene, Railway fuel:

Effective Date

Assistance

August 1, 1942	For use in N.S., N.B., P.E.I. or Quebec, the difference between the laid down cost of Cape Breton coal at Moncton when moved via Pte. du Chene and the laid down cost at the same point if transported all rail from Sydney.
1944, 1945 & 1946	No longer applicable.



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

276

Shipments via St. John, N.B. to points in the Province of Quebec; Industrial and Railway use:

Effective Date

Assistance

February 15, 1943

The difference in amount per net ton between the laid down cost of Nova Scotia and imported coal up to \$2.00 per net ton.

1944, 1945 & 1946

No longer applicable.

P.C. 944 covering Canadian coal used at a coke and gas plant:

Effective Date

Assistance

Apr 1, 1932

Difference between laid down cost of Canadian coal and imported coal up to \$1.00 per ton.

May 1, 1942

P.C. 3637 adds: That, for coke and gas plants in Canada which, during the fiscal year ended March 31, 1942, were using Canadian coal upon which assistance was paid in the terms of Order-in-Council P.C. 944 of the 26th day of April, 1932 the assistance payable as from April 1, 1942 shall not be less than the rate of assistance which was paid on such coal during the basis period Sept. 15 to Oct. 11, 1941, unless, due to changed competitive conditions, it is found that the differential calculated for the basic period can be reduced without endangering the ceiling price established on the coke produced.

March 31, 1949

Revoked.

Coal Exported:

Effective Date

Assistance

April 1, 1955

Effective June 1, 1955 up to \$2.50 per ton on 120,000 tons and up to \$2.30 per ton on next 130,000 tons.

April 1, 1958

Up to \$4.00 per net ton

Appendix No. 36 Pg. 7



SUBVENTION RATES APPLICABLE
TO NOVA SCOTIA COAL

277

To Newfoundland shipments:

Effective Date

Assistance

April 1, 1949

Ports situated on Gulf of St. Lawrence up to
\$2.00 per net ton

April 1, 1952

Maximum increased to \$3.00 per net ton

October 28, 1954

Flat rate \$2.40 per net ton to St. John's
Lewisporte.

January 15, 1955

Rate of \$2.40 extended to all ports in Newfoundland

April 1, 1955

Assistance expired.

To Springhill coal:

Effective Date

Assistance

August 22, 1957

Special assistance of \$2.00 per net ton to direct
shipments to consumers in Quebec and Ontario;
shipments to coal docks in Quebec for blending
with other Nova Scotia coal \$3.50 per net ton.

Additional to the above assistance, Springhill
received the benefit of the regular subvention
rates applicable to all rail and ex dock shipments.



COAL SHIPPED UNDER SUBVENTION

278

QUEBEC AND ONTARIO

<u>Year</u>	<u>Quebec Tonnage</u>	<u>Ontario Tonnage</u>	<u>Total Net Tons</u>
1924	20,350	21,617	41,967
1928	76,717	32,648	109,365
1929	220,566	77,812	298,378
1930	276,797	94,182	370,979
1931	302,617	98,218	400,835
1932	430,927	258,906	689,833
1933	854,778	492,287	1,347,065
1934	865,651	860,433	1,726,084
1935	688,615	876,605	1,565,220
1936	649,790	987,657	1,637,447
1937	788,266	1,093,383	1,881,649
1938	666,604	685,768	1,352,372
1939	949,667	1,355,409	2,305,076
1940	1,359,034	556,856	1,915,890
1941	1,846,218	91,091	1,937,309
1942	1,491,691	-	1,491,691
1943	659,914	-	659,914
1944	422,081	-	422,081
1945	162,599	-	162,599
1946	417,735	-	417,735
1947	523,479	-	523,479
1948	1,645,597	-	1,645,597
1949	1,845,228	-	1,845,228
1950	1,990,338	-	1,990,338
1951	1,906,396	-	1,906,396
1952	1,626,807	-	1,626,807
1953	1,702,076	27,129	1,729,205
1954	2,098,589	198,601	2,297,190
1955	2,296,751	179,199	2,475,950
1956	2,282,071	180,549	2,462,620
1957	1,745,014	114,025	1,859,039
1958	1,620,893	503,145	2,124,038
1959	1,650,000	666,533	2,316,533
	36,083,856	9,452,053	45,535,909

Appendix No. 37



NET TONS DOSCO COAL DELIVERED TO
ST. LAWRENCE DISTRIBUTING DOCKS

279

1945 - 1959

<u>Year</u>	<u>Montreal</u>	<u>Three Rivers</u>	<u>Quebec City</u>	<u>Chicoutimi</u>
1945	88,833	6,783	20,087	-
1946	177,947	135,165	93,006	-
1947	96,176	51,178	142,512	95,966
1948	465,409	209,583	279,731	153,815
1949	700,417	302,707	321,701	76,717
1950	587,695	218,570	403,995	104,470
1951	469,483	226,158	435,832	155,842
1952	544,497	135,487	261,396	150,117
1953	740,812	270,319	252,505	116,918
1954	1,146,447	244,407	243,196	111,253
1955	1,039,934	211,440	249,579	111,217
1956	912,214	153,309	202,090	25,935
1957	956,905	224,244	213,317	9,852
1958	1,330,582	69,906	151,697	15,747
1959	1,155,716	39,626	162,456	16,033

Appendix No. 38



ANGUS, STONEHOUSE & CO. LTD
TORONTO, ONTARIO

DOSCO COAL SHIPMENTS
TO CHIEF QUEBEC CONSUMING CENTRES

1945 to 1959
Net Tons 280

Location	Year	Cement Plants	Paper Mills	Other Industrials	Govt. Buildings	Railways	Bunkers	Distributors	Total
Montreal	1945	26,546	9,413	400				326	26,546
Three Rivers			2,410					10,139	10,139
Donnacona			5,353					2,410	2,410
Nairn's Falls								5,353	5,353
Quebec				26,957				6,697	33,654
Chandler				31,936					31,936
Sherbrooke Area				6,475					6,475
Beloeil				9,257					9,257
Noranda				10,568					10,568
Montreal	1946	49,565		75,745				28,806	125,310
Quebec				17,346				12,641	46,152
Three Rivers			48,658	4,754					66,053
Shawinigan Falls			4,574						4,574
Grand' Mere			8,252						8,252
Beaupre			30,263						30,283
Donnacona			15,349						15,349
Nairn's Falls			7,733						7,733
Chandler				31,233					31,233
Magog				21,422					21,422
Drummondville				1,489					1,489
Sherbrooke Area				6,075				3,399	9,474
Beloeil				8,700					8,700
Noranda				60,530					60,530

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<u>Location</u>	<u>Year</u>	<u>Cement Plants</u>	<u>Paper Mills</u>	<u>Other Industrials</u>	<u>Govt. Buildings</u>	<u>Railways</u>	<u>Bunkers</u>	<u>Distributors</u>	<u>Total</u>
Montreal	1947	29,092		5,752			10,694	14,763	60,301
Quebec			27,078	19,784				71,879	91,663
Three Rivers			3,872	8,282				8,637	43,997
Shawinigan Falls			665	12,902					16,774
Grand' Mere			36,737						665
Beaupre			7,865						36,737
Donnacoma			4,573						7,865
LaTuque			6,895						4,573
Nairn's Falls			59,395						6,895
River Bend			36,574						59,395
Dolbeau									36,574
Port Alfred				38,628					38,628
Chandler				36,718					36,718
Magog				41,094					41,094
Drummondville				1,617					1,617
Sherbrooke Area				1,733					7,859
Asbestos				395				6,126	395
St. Hyacinthe								2,423	2,423
Windsor Mills			5,704						5,704
Beloeil				7,940					7,940
Noranda				72,783					72,783
Montreal	1948	168,541		89,976	25,546		611	206,824	491,498
Quebec				20,041				161,440	181,481
Three Rivers			78,150	11,729				28,964	118,843
Shawinigan Falls			41,068	60,687					101,755
Grand' Mere			40,193						40,193
Beaupre			35,566						35,566
Donnacoma			52,355						52,355
LaTuque			25,742						25,742
Nairn's Falls			18,520						18,520
River Bend			59,123						59,123
Dolbeau			45,817						45,817
Port Alfred				180,773					180,773
Chandler				36,043					36,043



Location	Year	Cement Plants	Paper Mills	Other Industrials	Govt. Buildings	Railways	Bunkers	Distributors	Total
Magog	1948			37,824					37,824
Drummondville (Cont.)				4,721					4,721
Sherbrooke Area				7,068				39,454	46,522
Asbestos				9,749				8,553	9,749
St. Hyacinthe			14,918	2,153					10,706
Windsor Mills									14,918
St. Johns								1,588	1,588
Mont Rolland			11,001						11,001
Beloeil				9,516					9,516
Staynerville				5,299					5,299
Noranda				68,363					68,363
Montreal	1949	210,922		169,578	28,686		16,521	298,679	724,386
Quebec				22,888		36,288		128,403	187,579
Three Rivers			95,335	17,330		25,901		32,650	171,216
Shawinigan Falls			49,589	87,256					136,845
Grand' Mere			41,092						41,092
Beaupre			37,039						37,039
Donnacoona			57,751						57,751
LaTuque			34,089						34,089
Nairn's Falls			23,607						23,607
River Bend			41,184						41,184
Dolbeau			18,211						18,211
Port Alfred				90,276					90,276
Chandler				27,809					27,809
Magog				55,580					55,580
Drummondville				10,616					10,616
Sherbrooke Area				11,218					84,708
Asbestos				34,154					34,154
St. Hyacinthe				1,967					12,912
Windsor Mills		20,220						10,945	20,220
Mont Rolland			2,513						2,513
Beloeil									13,429
St. Hilaire				13,429					9,255
Buckingham			15,379	9,255					15,379
Noranda				120,023					120,023

Location	Year	Cement Plants	Paper Mills	Other Industrials	Govt. Buildings	Railways	Bunkers	Distributors	Total
Montreal	1950	235,539							
Quebec				48,563	34,398	149,962	3,497	297,887	619,884
Three Rivers			25,766	27,820		64,314		136,007	313,789
Shawinigan Falls			19,114	9,500				26,059	125,639
Grand' Mere			21,775	98,087					117,201
Beaupre			45,009						21,775
Donncona			40,159						45,009
LaTuque			27,516						40,159
Nairn's Falls			8,806						27,516
River Bend			54,521						8,806
Dolbeau			36,680						54,521
Port Alfred				50,191					36,680
Chandler				47,289					50,191
Magog				51,017					47,289
Drummondville				25,619					51,017
Sherbrooke Area				11,764					25,619
Asbestos				4,100				56,050	67,814
St. Hyacinthe				362				10,495	4,100
Windsor Mills			12,741						10,857
Mont Rolland			2,502						12,741
Beloeil				11,670					2,502
St. Hilaire				16,363					11,670
Staynerville				6,293					16,363
Noranda				92,878					6,293
									92,878
Montreal	1951	242,777							
Quebec				29,287	33,175		1,657	230,757	537,653
Three Rivers			29,897	27,002		168,494		133,653	329,149
Shawinigan Falls			18,206	10,591		68,523		25,192	134,203
Grand' Mere			17,747	81,461					99,667
Beaupre			48,015						17,747
Donncona			25,685						48,015
La Tuque			34,597						25,685
Nairn's Falls			10,554						34,597
River Bend			66,336						10,554
Dolbeau			46,456						66,336
									46,456



Location	Year	Cement Plants	Paper Mills	Other Industrials	Govt. Buildings	Railways	Bunkers	Distributors	Total
Port Alfred	1951			69,426					69,426
Chandler	(Cont.)			28,223					28,223
Magog				39,974					39,974
Drummondville				27,321					27,321
Sherbrooke Area				9,393				41,299	50,692
Asbestos				9,799				8,251	9,799
St. Hyacinthe									8,251
Windsor Mills			8,066						8,066
St. Johns				6,668				3,089	9,757
St. Hubert				4,092					4,092
Beloil				9,958					9,958
St. Hilaire				12,792					12,792
Staynerville				8,001					8,001
Noranda				97,677					97,677
Montreal	1952	258,183			32,651		6,555	235,594	608,916
Quebec				75,933				113,980	145,614
Three Rivers			15,875	31,634				23,098	78,166
Shawinigan Falls			28,304	12,451		26,742			63,722
Grand' Me'e			22,563	35,418					22,563
Beaupre			38,774						38,774
Donncona			56,933						56,933
LaTuque			7,339						7,339
Nairn's Falls			13,159						13,159
River Bend			75,556						75,556
Dolbeau			45,361						45,361
Port Alfred				80,365					80,365
Chandler				28,289					28,289
Magog				43,507					43,507
Drummondville				3,723				38,280	3,723
Sherbrooke Area				6,891				6,224	45,171
Asbestos				27,191					27,191
St. Hyacinthe									6,224
Windsor Mills									13,725
St. Johns								1,547	8,454
St. Hubert					6,907				9,469
Mont Rolland			3,733		9,469				3,733

Appendix No. 39 Pg. 5



<u>Location</u>	<u>Year</u>	<u>Cement Plants</u>	<u>Paper Mills</u>	<u>Other Industrials</u>	<u>Govt. Buildings</u>	<u>Railways</u>	<u>Bunkers</u>	<u>Distributors</u>	<u>Total</u>
Beloeil	1952			13,615					13,615
St. Hilaire	(Cont.)			10,071					10,071
Staynerville				5,119					5,119
Noranda				95,152					95,152
Montreal	1953	250,571		86,863	37,275	30,564	6,240	288,621	700,134
Quebec				24,852		40,632		56,288	121,772
Three Rivers			40,397	12,329		39,038		23,272	115,036
Shawinigan Falls			62,145	70,632					132,777
Grand' Mere			53,271						53,271
Beaupre			41,963						41,963
Donnacona			54,564						54,564
La Tuque			37,106						37,106
Nairn's Falls			16,822						16,822
River Bend			60,595						60,595
Dolbeau			30,897						30,897
Port Alfred				31,644					31,644
Chandler				32,944					32,944
Magog				32,418					32,418
Drummondville				5,680					5,680
Sherbrooke Area				6,534				50,542	57,076
Asbestos				26,389				5,590	26,389
St. Hyacinthe								14,955	14,955
Windsor Mills			14,955		1,507			1,381	2,888
St. Johns					8,566				8,566
St. Hubert									
Mont Rolland			11,326						11,326
Beloeil				14,655					14,655
St. Hilaire				8,925					8,925
Gatineau			94,165						94,165
Staynerville				6,298					6,298
Buckingham			20,424						20,424
Noranda				44,474					44,474

Appendix No. 39 Pg. 6



		286		Page 7					
<u>Location</u>	<u>Year</u>	<u>Cement Plants</u>	<u>Paper Mills</u>	<u>Other Industrials</u>	<u>Govt. Buildings</u>	<u>Railways</u>	<u>Bunkers</u>	<u>Distributors</u>	<u>Total</u>
Montreal	1954	240,449		109,161	40,065	48,336	3,893	407,253	849,157
Quebec				33,699				93,409	127,108
Three Rivers			38,905	12,149		50,302		21,624	122,980
Shawmigan Falls			52,197	102,784					154,981
Grand' Mere			33,015						33,015
Beaupre			20,298						20,298
Donncona			39,556						39,556
LaTuque			8,489						8,489
River Bend			51,315						51,315
Dolbeau			29,591						29,591
Port Alfred				105,606					105,606
Chandler				16,887					16,887
Magog				42,761					42,761
Drummondville				49,689					49,689
Sherbrooke Area				6,138				45,648	51,786
Asbestos				9,987				9,987	9,987
St. Hyacinthe				4,650	8,804			4,212	8,862
St. Johns					11,285			3,644	12,448
St. Hubert									11,285
Mont Rolland			9,667						9,667
Beloeil				14,485					14,485
St. Hilaire				8,525					8,525
Gatineau			123,222						123,222
Staynerville				6,306					6,306
Buckingham			21,020						21,020
Noranda				120,752					120,752

Appendix No. 39 Pg. 7



Location	Year	Cement Plants	Paper Mills	Other Industrials	Govt. Buildings	Railways	Bunkers	Distributors	Total
Montreal	1955	245,412		101,356	36,292	73,893	3,586	275,670	736,209
Quebec			43,260	33,059		34,314		101,563	168,936
Three Rivers			60,569	14,844		50,692		19,205	128,001
Shawinigan Falls			48,182	130,545					191,114
Grand' Mere			45,799						48,182
Beaupre			81,003						45,799
Donncona			64,603						81,003
LaTuque			46,205						64,603
River Bend			61,031						46,205
Dolbeau				50,348					61,031
Port Alfred				12,510					50,348
Chandler				40,819					12,510
Magog				52,167					40,819
Drummondville				6,127				43,801	52,167
Sherbrooke Area				8,864				2,881	49,928
Asbestos				4,337					8,864
St. Hyacinthe			9,639					1,745	7,218
Windsor Mills					9,800				9,639
St. Johns					10,470				11,545
St. Hubert									10,470
Mont Rolland			7,339						7,339
Beleuil				10,970					10,970
St. Hilaire				9,440					9,440
Gatineau			173,568						173,568
Staynerville				6,536					6,536
Buckingham			49,168						49,168
Noranda				104,388					104,388

Appendix No. 39 Pg. 8



<u>Location</u>	<u>Year</u>	<u>Cement Plants</u>	<u>Paper Mills</u>	<u>Other Industrials</u>	<u>Govt. Buildings</u>	<u>Railways</u>	<u>Bunkers</u>	<u>Distributors</u>	<u>Total</u>
Montreal	1956	304,473		99,512	30,555	11,248	1,590	258,650	706,008
Quebec				15,463				91,961	107,424
Three Rivers			17,779	9,459		21,517		15,846	64,601
Shawinigan Falls			65,383	99,316					164,699
Grand' Mere			33,337						33,337
Beaupre			50,990						50,990
Donncona			48,834						48,834
La Tuque			96,809						96,809
River Bend			82,140						82,140
Dolbeau			48,804						48,804
Port Alfred			36,937						36,937
Magog				25,398					25,398
Drummondville				51,276					51,276
Sherbrooke Area				51,994					51,994
Asbestos				7,046				39,155	46,201
St. Hyacinthe				9,781					9,781
St. Johns				4,725	9,270			2,566	7,291
St. Hubert					12,001			1,081	10,351
Mont Rolland			8,979						8,979
Beloeil				13,556					13,556
St. Hilaire				6,627					6,627
Gatineau			123,055						123,055
Staynerville				6,890					6,890
Buckingham			25,349						25,349
Hull		41,276							41,276
Noranda				101,079					101,079



<u>Location</u>	<u>Year</u>	<u>Cement Plants</u>	<u>Paper Mills</u>	<u>Other Industrials</u>	<u>Govt. Buildings</u>	<u>Railways</u>	<u>Bunkers</u>	<u>Distributors</u>	<u>Total</u>
Montreal	1957	322,612		118,020	21,879	373		251,822	714,706
Quebec				30,859				85,728	116,587
Three Rivers			15,339	10,745		1,696		11,960	39,740
Shawinigan Falls			34,876	76,771					111,647
Grand' Mere			32,098						32,098
Beaupre			15,555						15,555
Donnacoona			63,560						63,560
LaTuque			62,830						62,830
River Bend			38,573						38,573
Dolbeau			33,385						33,385
Port Alfred			34,027	38,283					72,310
Magog				50,712					50,712
Drummondville				39,220					39,220
Sherbrooke Area				7,271				39,254	46,525
Asbestos				7,914				2,712	7,914
St. Hyacinthe				4,677				867	7,389
St. Johns									867
Mont Rolland			9,404						9,404
Beloeil				13,978					13,978
St. Hilaire				6,844					6,844
Gatineau			89,108						89,108
Staynerville				6,712					6,712
Buckingham			21,918						21,918
Hull		47,569							47,569
Noranda				128,357					128,357

Appendix No. 39 Pg. 10



Location	Year	Cement Plants	Paper Mills	Other Industrials	Govt. Buildings	Railways	Bunkers	Distributors	Total
Montreal	1958	300,370		128,025	35,950	38,799		265,638	768,782
Quebec				24,956				86,804	111,760
Three Rivers			21,340	10,276		2,744		5,882	40,242
Shawinigan Falls			4,993	62,602					67,595
Grand' Mere			1,316						1,316
Beaupre			16,011						16,011
Donncona			46,825						46,825
LaTuque			21,194						21,194
River Bend			14,519						14,519
Magog				51,137					51,137
Drummondville				14,926					14,926
Sherbrooke Area				7,070				35,021	42,091
Asbestos				2,553					2,553
St. Hyacinthe				4,638				4,568	9,206
St. Johns					6,835			3,895	10,730
St. Hubert					13,688				13,688
Mont Roland			8,399						8,399
Beloeil				9,481					9,481
St. Hilaire				6,671					6,671
Gatineau			169,432						169,432
Staynerville				6,398					6,398
Buckingham			1,426						1,426
Hull		47,094							47,094
Noranda				139,598					139,598

Appendix No. 39 Pg. 11



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<u>Location</u>	<u>Year</u>	<u>Cement Plants</u>	<u>Paper Mills</u>	<u>Other Industrials</u>	<u>Govt. Buildings</u>	<u>Railways</u>	<u>Bunkers</u>	<u>Distributors</u>	<u>Total</u>
Montreal	1959	313,763		69,240	31,460			270,050	684,513
Quebec				15,000				96,000	111,000
Three Rivers			23,000	9,000				7,000	39,000
Shawinigan Falls			20,000	55,000					75,000
Grand' Mere			10,000						10,000
Beaupre			15,500						15,500
Donncona			45,000						45,000
LaTuque			22,000						22,000
River Bend			15,000						15,000
Magog				30,000					30,000
Sherbrooke Area								35,000	35,000
St. Hyacinthe				4,700				2,500	7,200
St. Johns					7,000			3,500	10,500
St. Hubert					12,500				12,500
Mont Rolland			9,300						9,300
Beloeil				8,600					8,600
St. Hilaire				6,600					6,600
Gatineau			225,000						225,000
Staynerville				6,600					6,600
Buckingham			4,400						4,400
Hull		29,879							29,879
Noranda				140,000					140,000



ANGUS, STONEHOUSE & CO LTD
TORONTO, ONTARIO

DOSCO COAL SHIPMENTS
TO CHIEF ONTARIO CONSUMING CENTRES

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Destination	1945	Net Tons 1945 to 1959					Destination		
	to 52	1953	1954	1955	1956	1957	1958	1959	Total
Ontario:	Nil								
Ottawa:									
Paper Mills		1,587	25,952	50,215	57,564	59,360	57,638	57,000	309,316
Distributors		13,594	51,359	56,647	32,231	40,518	88,485	90,000	372,834
Hawkesbury:									
Paper Mills		38,258	61,946	64,970	38,986	38,799	36,193	38,600	317,752
Cornwall:									
Paper Mills							63,636	65,000	128,636
Kingston:									
Govt. Bldgs.							9,456	18,000	27,456
Distributors							10,439	8,500	18,939
Trenton:									
Govt. Bldgs.							12,957	17,500	30,457
Point Anne:									
Cement Plants							100,986	89,022	190,008
Oshawa:									
Other Indust.								12,700	12,700
Toronto:									
Other Indust.							23,776	27,000	50,776
Govt. Bldgs.							8,211	17,000	25,211
Distributors							5,425	1,000	6,425
Port Colborne:									
Cement Plants								18,863	18,863
Thorold:									
Paper Mills								8,063	8,063
Woodstock:									
Cement Plants								91,232	91,232
London:									
Govt. Bldgs.							4,947	11,000	15,947
Copper Cliff:									
Other Industrials							42,267	80,000	122,267
Yearly Totals:		53,439	139,257	171,832	128,781	138,677	464,416	650,480	746,882

Appendix No. 40

Appendix No. 40



ESTIMATED COAL SALES - COAL YEARS

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	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69
Atlantic Provinces	2,200,000	2,170,200	2,241,000	2,307,900	2,345,900	2,345,900	2,345,900	2,345,900	2,345,900	2,345,900
Quebec	1,625,000	1,221,330	1,221,330	1,221,330	1,221,330	1,221,330	1,221,330	1,221,330	1,221,330	1,221,330
Ontario	750,000	562,500	562,500	562,500	562,500	562,500	562,500	562,500	562,500	562,500
Add Quebec Thermal Plants	4,575,000	3,954,030	4,024,830	4,091,730	4,129,730	4,129,730	4,129,730	4,129,730	4,129,730	4,129,730
Add Ontario Hydro	-	-	-	-	-	300,000	500,000	500,000	700,000	700,000
Add Prepared Sizes (Available from Hydro Slack Prod.)	-	-	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Add Gattineau & Hawkesbury (If still on coal)	Incl. in above	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
*Less poss. gas conversions	4,575,000	4,204,030	5,024,830	5,291,730	5,329,730	5,629,730	5,829,730	5,829,730	6,029,730	6,029,730
Less Screened available if gas conversions occur	-	250,000	666,500	666,500	666,500	666,500	666,500	666,500	666,500	666,500
	4,575,000	3,954,030	4,150,330	4,516,980	4,554,980	4,963,230	5,163,230	5,163,230	5,363,230	5,363,230

*During the year 1960/61 and those following, sales may be considerably less than estimated due to gas competition in the Province of Quebec.

Appendix No. 41



DOSCO COAL SHIPMENTS

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NET TONS

<u>Year</u>	<u>Atlantic Provinces</u>	<u>Export</u>	<u>Quebec</u>	<u>Ontario</u>	<u>Total</u>
1950	3,917,118	43,555	2,020,338	-	5,981,011
1951	3,676,453	44,010	1,936,396	-	5,656,859
1952	3,555,359	44,738	1,661,807	-	5,261,904
1953	3,206,052	-	1,733,076	27,129	4,966,257
1954	2,866,169	-	2,128,589	198,601	5,193,359
1955	2,869,040	259,559	2,323,751	179,199	5,631,549
1956	2,855,796	235,230	2,303,071	180,549	5,574,646
1957	2,836,834	-	1,764,014	114,025	4,714,873
1958	2,190,029	-	1,640,893	503,145	4,334,067



1 MR. MARSH: If the mines are not going
2 to close before Mr. Rand brings down his report,
3 what about the sixty days' idle time? Would that
4 indicate that the mines were going to be left as
5 is in their present productive capacity until Mr.
6 Rand brings down his report? I understood you
7 would not have both, one or the other.

8 MR. FAIRLEY: The figure of sixty days
9 which by the way, has been estimated at the present
10 time, and as you say we won't have both, is based
11 on the assumption that the mines will not close during
12 this calendar year. If some of the mines do close
13 this calendar year due to our inability to work out
14 some satisfactory arrangement to keep them open,
15 then that figure would change.

16 MR. MARSH: Which means you could not
17 definitely determine by the fact that you mentioned
18 sixty days that the mines would not close in the
19 calendar year 1960.

20 THE CHAIRMAN: What was that?

21 MR. FAIRLEY: I am not sure I understand
22 that.

23 MR. MARSH: The fact that sixty days' idleness
24 is mentioned in the brief means that you could not
25 use that as a reason for assuming that the mines would
26 not definitely close in the year 1960.

27 MR. FAIRLEY: No, sir, you cannot use
28 that as a basis for assuming they will not close.

29 MR. MARSH: The Joy Machine and being
30



1 presently used in number twenty for the levels,
2 for retreating walls, weren't they available ten
3 or fifteen years ago in the United States.

4 MR. FAIRLEY: Were they built? Was the
5 Joy Machine built ten or fifteen years ago.

6 MR. GORDON: They were built then and
7 not used.

8 MR. FAIRLEY: Yes. I don't know when
9 the first machine went in.

10 MR. GORDON: I saw the first machine of
11 that type. It was developed by a man named Silver
12 down in Colorado. The patents were obtained
13 by the Joy Company and they started to develop,
14 actually started to develop at about the end of 1948.
15 They produced the machine and it was put on the
16 market in a form that would not allow it to work
17 without breakdowns, and frequent breakdowns. I should
18 say it was not until about 1955 or thereabouts that
19 a machine was developed that could stand up against
20 continuous operations.

21 The machine that we brought, which is a
22 standard Joy Machine had to have its jib completely
23 overhauled and rebuilt after it produced forty five
24 thousand tons of coal, so that actually to do the
25 really hard work, the machine is not properly
26 developed yet, and a lot more has to be done with
27 it before it is a truly efficient machine.

28 THE CHAIRMAN: That is the Joy Machine?

29 MR. GORDON: The Joy Machine itself.
30



1 MR. MARSH: We want to ask you, Mr. Gordon,
2 what precisely do you make of the Joy loaders presently
3 being used in number twenty and twenty-six units?

4 MR. GORDON: It is a peculiar thing, Mr.
5 Marsh. It is a standard machine built many years
6 ago and it is employed by many mines. There are
7 literally thousands of those machines being used in
8 the United States. I have seen many of them working
9 in different American mines, and generally speaking
10 they do not seem to have too much struggle with them.

11 We have a great deal more trouble than
12 the average American mine has with those machines.
13 Why it is so, I do not know, but it is so.

14 MR. MARSH: Would the difference be in
15 submarine and subterranean mines, possibly?

16 MR. GORDON: I do not think so. Whether
17 the difference is in the fact that a great many of
18 the machines are using direct currents, while we
19 are using alternating currents, that may have something
20 to do with it, because the only difference in the
21 machines is the fact that the average American mine
22 uses a direct current, while ours is an alternating
23 machine, but the fact is that the American mines have
24 very much less trouble with the average Joy loader
25 with the 8 BU or 12 BU than we have.

26 MR. MARSH: That was the first type of
27 mechanization introduced?

28 MR. GORDON: That is right.

29 MR. MARSH: Another question, Mr. Gordon,
30



1 about the down draught. We have mixed feelings from
2 our people on the down draught. Some of the people
3 have indicated, as the company claimed, that it was
4 the best and most efficient furnace in operation in
5 the Maritime Provinces at the time it was put out.
6 Others were not so much impressed with it. In your
7 opinion was it a total failure?

8 MR. FAIRLEY: May I explain to the
9 Commissioner, it is the down draught furnace which
10 I mentioned that Dosco developed.

11 MR. GORDON: My own opinion is it was a
12 highly efficient machine. I am using one of them
13 myself, and I am very pleased with it. There have
14 been a number of people who I think very largely
15 because of poor faulty installations did not have
16 a very much satisfaction with it. We know it is
17 a very efficient furnace, but if it is not properly
18 installed it will give trouble.

19 We know, too, that in some cases difficulty
20 is being experienced with burning of the coal, and
21 the crushing arrangements due to the intense heat that
22 is created in the furnace itself, and those have
23 to be replaced from time to time.

24 Further research might have corrected those
25 faults, but the point remains that we cannot sell
26 them in sufficient quantities. The price, even in
27 building them in lots of five hundred, was rather
28 large. It was larger than the price of a comparable
29 oil furnace, and people would just not buy them.
30



1 We sold, in our wholesales efforts -- and a real
2 effort was made -- only about three hundred units
3 of all sizes.

4 THE CHAIRMAN: It was economical in its
5 use of coal?

6 MR. GORDON: Very, sir. It had the highest
7 efficiency of any domestic heating unit that I know
8 of.

9 MR. FAIRLEY: Was the difficulty in
10 maintainance?

11 MR. GORDON: The maintainance of the coal
12 and the crushing of it. Some alloy might have been
13 developed that would have increased the life, or
14 some slight change in the form, or some increased
15 ventilation of it might have done something. For
16 instance, we built a large unit which was water
17 cooled and had a water cooled motion, and it stood
18 up fairly well, but the program was stopped before
19 the development of that particular machine was
20 completed.

21 THE CHAIRMAN: Was just one size of
22 furnace made?

23 MR. GORDON: No sir, there were altogether
24 five different sizes.

25 THE CHAIRMAN: I see.

26 MR. MARSH: I am not finished yet, Mr.
27 Chairman. Actually it was not a failure.

28 MR. GORDON: Well ---

29 THE CHAIRMAN: Those are the facts, whether
30



1 you call it a failure or not.

2 MR. GORDON: You can take your choice.

3 The point is, a lot of people, particularly people
4 who were looking for a cheap furnace and a cheap
5 installation, had furnaces that were not as well
6 set up as they ought to have been. The result was,
7 they complained very bitterly, and those complaints
8 forced the withdrawal.

9 The fact that we could not sell in
10 quantities, coupled with the complaints that we got
11 and the demands on us for free service -- and we
12 carried on a free service program for about two
13 years -- forced the withdrawal of the furnace from
14 the market.

15 But I feel that the furnace certainly as
16 a unit, as a domestic heating unit, was far more
17 efficient than any coal burning domestic unit I know
18 of, and was much more efficient than an oil burning
19 domestic unit.

20 MR. MARSH: I think, Mr. Gordon, I can
21 properly assume it was a question of finances, or
22 lack of finances.

23 MR. GORDON: Not a lack of finances but
24 it was a matter of cost.

25 THE CHAIRMAN: The initial cost was large?

26 MR. GORDON: The initial cost of the furnace
27 in spite of the fact that the furnace was built in
28 large quantities there were five hundred units
29 produced in order to get them as cheaply as possible,
30



1 and the jigging material produced five hundred
2 assemblies, and so on. In spite of that, to lower
3 the cost to the lowest possible point, we could not
4 attract the customers today because of price.

5 MR. MARSH: Has the company ever tried
6 to use the Joy continuous miner on longwall? Would
7 it be feasible?

8 MR. GORDON: It is not feasible.

9 MR. MARSH: Why not?

10 MR. GORDON: Let me tell you this. When
11 I saw the machine first, I saw the great possibility
12 of that machine as a long wall machine, and I asked
13 the Joy Company who owned the patents if they would
14 design for us a long wall machine. They told me,
15 perhaps in five years they would think about it,
16 and it was then we got the rights to go ahead and
17 build our own.

18 MR. MARSH: Another question. The company,
19 now they are already Lingan area in number sixteen
20 colliery on the east side of the mine, already in
21 the Lingan area which Mr. Gordon mentioned, and Mr.
22 Fairley mentioned, have a future new opening, if
23 necessary. The coal is high enough. As Mr. Gordon
24 mentioned this morning, in his brief, it is of
25 excellent quality and it is high enough for the
26 use of continuous miners, normal ordinary continuous
27 miners which the company, a subsidiary of Dosco,
28 produces in Trenton.

29 I was wondering if they gave any thought
30



1 to taking the coal out of the Lingan seam due to
2 its high quality and its practicability towards
3 continuous mining, which would consequently lower
4 the cost, if they gave any consideration to doing
5 this. It seems logical to the union they should
6 do that at this time.

7 MR. GORDON: On the east side of number
8 sixteen colliery there is a lot of falling stone
9 in certain areas. There is a thickening at the
10 addition of a leaf to the seam as you go further
11 towards the Lingan area.

12 Our geologist gave us certain ideas where
13 this joining up would take place and what roof
14 conditions we might expect. Naturally, since the
15 Lingan seam was the most important reserve out of
16 high grade coal that there was in the area,
17 we wanted to be as sure as we could be of that that
18 coal would be light. So a pair of walls in sixteen
19 colliery, working to the east were driven into the
20 barrier between sixteen and Lingan in order to
21 determine just what was happening. We found that
22 as we entered or approached the Lingan area that the
23 height of coal increased and the roof improved.

24 It is not our intention to work that
25 from that area, from sixteen, because we are already
26 a mile and a half from the main deep of number
27 sixteen colliery, or approximately that difference.

28 MR. MARSH: Do you mean it would be
29 possibly be too expensive because of the long haul.
30



1 MR. GORDON: It would be an extreme haul
2 through longwall roads.

3 MR. MARSH: It puzzles me, because you men-
4 tioned this morning that you could take sixteen coal
5 out through twelve. Would the same thing also apply
6 to that situation?

7 MR. GORDON: Not so easily, because what would
8 have to happen would be the main arteries in number
9 twelve immediately would have to be belted and the coal
10 brought up to the surface by means of the cable belt
11 such as we have on the Princess tunnel, rather than with
12 boxes so that we could have the capacity.

13 MR. MARSH: Could not the same thing apply
14 in the sixteen?

15 MR. GORDON: Not so easily, because in the
16 first place the level is not a straight road and in the
17 second place it is a road driven through an extracted
18 area, so that you have got a good deal of heaving and
19 distortion of the roadway.

20 MR. MARSH: Won't that apply in twelve also,
21 a roadway driven through an extracted area to get to
22 the coal from sixteen.

23 MR. GORDON: No, that would not be the case
24 at all. It would be a case of a cross mitre from
25 twelve into sixteen, and the coal would be taken up
26 the main haulage right to sixteen, that is the main
27 deep of twelve colliery.

28 MR. MARSH: That would be a shorter haul.

29 MR. GORDON: It would be roughly as afar as
30 hauling up through the main deep haul. It would be



1 about the same length, but perhaps it would be shade
2 longer. That is, the haul up the main deep in number
3 twelve colliery would be a shade longer.

4 MR. MARSH: Therefore that argument does not
5 hold true, does it.?

6 MR. GORDON: I am not talking about the main
7 area. I am talking about the hauling of number sixteen
8 coal. The coal that is presently tributary to sixteen
9 colliery.

10 MR. MARSH: I was using one as a comparison
11 to the other.

12 MR. GORDON: But you cannot do that in the
13 one because you have got straight roads laid out for
14 main haulage purposes and in the other you have a
15 road through a long waste, and the road itself is not
16 straight.

17 MR. MARSH: Isn't that a fairly good road
18 due to the fact it has to stand up under the terrific
19 strain of the weight of the diesels which are con-
20 tinually passing over it, and isn't it permanently
21 constructed for protection due to the fact it is
22 completely extracted?

23 MR. GORDON: It is not permanent by any
24 means. There has been a good deal of repair work done
25 on the road and is still being done on the road.

26 MR. MARSH: The same thing is applicable.

27 MR. GORDON: It does not distort in the same
28 manner.

29 MR. MARSH: I won't belabour that point. I
30 wanted to bring that out and I wanted to go over to the



1 tunnel in Glace Bay. Naturally we are extremely
2 interested in it due to that fact that we felt if that
3 tunnel was driven it would prevent the closure of
4 Caledonia Mine.



1 Now why won't the company at this time consider the
2 completion of that tunnel?

3 MR. GORDON: Well in order to make the driving
4 of the tunnel a paying proposition, it would have to
5 produce something of the order of 10,000 tons a day.

6 MR. MARSH: In other words, now I will
7 elaborate on that: actually what seams would that
8 coal come from?

9 MR. GORDON: The idea was to take 6,000
10 tons from Harbour Seam, that is today the present
11 20 working; 3,000 tons from the Phalen , today the
12 present number four working; and a further 1,000 tons
13 from the Hub, below the old number seven workings.
14 That was where the 10,000 tons were to come from.

15 Now 10,000 tons a day is a very large tonnage,
16 roughly $2\frac{1}{4}$ million tons a year on a full time basis.
17 We do not have the market for it.

18 MR. MARSH: Actually Mr. Gordon, correct
19 me if I am wrong, if you drilled that tunnel and you
20 are getting the production from Caledonia and from
21 number twenty through that tunnel -- you couldn't get
22 twenty-six could you?

23 MR. GORDON: No.

24 MR. MARSH: All right, you would get production
25 from Caledonia which is what twenty-five?

26 MR. GORDON: At the moment about 2400 tons.

27 MR. MARSH: Twenty-four, and the production
28 from number twenty which is?

29 MR. GORDON: At the moment it's around about
30



1 thirty-eight.

2 MR. MARSH: You would get thirty-eight, so
3 you could get 7,000, possibly in number twenty, as
4 opposed to the increase with the addition of the re-
5 treating wall. My point is this: wouldn't that
6 materially cut the cost of the coal produced in both
7 those collieries and give you a better chance to sell
8 it?

9 MR. GORDON: It would cost a good deal of
10 money to complete the tunnels at this time, that is
11 the tunnel to number twenty and then it would cost a
12 good deal of money to put on the tunnel between twenty
13 and four. There is a very high capital expenditure.
14 You said something about the cost of finishing the job
15 in driving that tunnel in number twenty.

16 Our present estimates are that that would cost
17 a little over \$4,000,000.00, about \$4,100,000.00 to
18 finish the tunnel into number twenty, and then there
19 is the additional cost of driving the tunnel into
20 number four. I have forgotten what the exact amount
21 of that would be, but it would be something of the
22 order of close to \$1,000,000.00.

23 MR. MARSH: That would be actually in total
24 \$5,000,000.00?

25 MR. GORDON: Roughly that.

26 MR. MARSH: That is a great amount of money.
27 I am just looking at this as an operative solution.

28 MR. GORDON: Don't forget you will get a
29 tonnage of coal that you can't market, and you have
30 added \$5,000,000.00 of capital money to your cost.



1 MR. MARSH: My point was you have eliminated
2 one of the reasons for your troubles in marketing by
3 cutting the cost of production and possibly increasing
4 your productivity and you would have a far better
5 operation in number four, I understand.

6 MR. GORDON: You would have a far better
7 operation Mr. Marsh in number twenty rather than in
8 number four.

9 MR. MARSH: As well as in number four. You
10 would eliminate a lot of your cost. It is only a
11 thought, and I just wanted to follow it through to see
12 what it would cost. I am satisfied with that \$5,000,000.

13 MR. GORDON : When this thing was gone into,
14 there was no question about it; we certainly would
15 cheapen our cost if that tunnel were put through and
16 we were running 10,000 tons a day from the tunnel.
17 No question about it. We would have had a considerably
18 cheaper cost than we are now getting from number twenty
19 and number four, but at the same time we cannot market
20 the coal today.

21 It is not a question of cost as far as that
22 is concerned. It is a question of marketing. You see,
23 don't forget this that unless the coal is sold in
24 a nonsubvention area, we do not make any profits, as
25 long as we do not get free of subvention altogether.
26 All that happens is that if the coal is cheaper in
27 a nonsubvention area, less subvention is required to
28 put the coal to market. That is all.

29 MR. MARSH: You see Mr. Gordon I am
30 anticipating a possible solution by Justice Rand and



1 I was thinking in terms of constructively trying to
2 save the Caledonia Mine, and also constructively in
3 trying to approach our basic problem on our part,
4 which is the high cost of production, and if this
5 would cut the high cost of production and save the
6 Caledonia Mine, then you have to figure out how much
7 it costs and then we are prepared to try and figure
8 out from there where the money is coming from.

9 MR. GORDON: Well the point is that we just do
10 not have the markets. That is all.

11 MR. MARSH: One further question. On the
12 north side you mention the possibility of Florence
13 Coal being taken out through the Princess Colliery.

14 MR. GORDON: A possibility.

15 MR. MARSH: Now I was wondering if that could
16 be developed over a period of years to its conclusion
17 much similar to what was done in Glace Bay at the time
18 they transferred the men from number two to number
19 twenty. I figured possibly you could retain a great
20 percentage of the men in Florence in the getting of
21 that coal, and taking it out through Princess so that
22 it would help to alleviate any distress.

23 MR. GORDON: No. Princess is not deep enough
24 for that yet.

25 MR. MARSH: My point was if Florence could
26 be carried over until the Princess was deep enough and
27 then it was done on a gradual basis.

28 MR. GORDON: It wouldn't give the relief
29 that we must have.
30



1 MR. MARSH: On the basis of your figuring,
2 Mr. Gordon, of 296,400 tons produced in Florence per
3 year and a life of ten to twelve years, there is
4 three and a half million tons, roughly, of coal there
5 that could be gotten that way.

6 MR. DOLHANTY: Those are figures you submitted
7 to the Government.

8 MR. GORDON: May I see them please?

9 MR. DOLHANTY: We are multiplying your
10 estimated production by twelve years.

11 MR. GORDON: I may have been over a little
12 bit in my number of years of life.

13 MR. DOLHANTY: In fact, in Halifax you said
14 as late as 1959 it was fifteen years life and as Mr.
15 Marsh was saying, on the basis of your estimated
16 production to the Provincial Government the 296, based
17 on the number of years, you said twelve years of life,
18 there would be 3,552,000 tons of coal left in the
19 Florence Colliery that could not be recaptured.

20 MR. GORDON: I say there is a possibility of
21 getting it out of Princess. There is a geological
22 difficulty. If you look at the plan you will see that
23 the Princess level and the Florence level are at right
24 angles to one another. Now just what that means, I
25 don't know. It may mean a very large fault, eventually,
26 or it may mean an almost steep bluff in the seam or
27 in the whole strata.

28 MR. DOLHANTY: You would say that is
29 excellent quality coal.
30



1 MR. GORDON: It is a good quality coal,
2 not excellent. It is a fairly high sulphur coal.

3 MR. DOLHANTY: The point Mr. Marsh was making
4 to the Commissioner that there would be $3\frac{1}{2}$ million
5 tons of coal lost.

6 MR. MARSH: To carry on, I have one more
7 question Mr. Commissioner. The company has indicated
8 in the brief that three mines are slated for closure.
9 It is interesting to note that the three mines so
10 named have been the most consistent in obtaining the
11 incentive bonus for production. Now is it to be
12 assumed that the mines that did not obtain the incentive
13 bonus were more profitable?

14 MR. GORDON: Mr. Marsh it was only yesterday
15 that I drew the attention of the President to the fact
16 that the three collieries that were fairly steadily
17 getting the output they were supposed to get were the
18 three collieries that were slated for closure.

19 Now it is a peculiar fact sir, but that is
20 the fact. I am not going to draw any conclusions from
21 that, but it is a fact that those three collieries for
22 the last number of months I am not going to say what
23 they were doing before the last few months, but during
24 the last few months they reasonably closely got the
25 coal that they were supposed to get.

26 MR. MARSH: Would we be right in assuming
27 then that your incentive bonus is going to close those
28 three collieries?

29 MR. GORDON: No, you would not.
30



1 MR. MARSH: That is the way the evidence
2 points.

3 MR. GORDON: No.

4 MR. MARSH: Because I say that, if the other
5 collieries are not making it and are not being faced
6 with the additional cost to the company of having to
7 pay \$5.00 a man roughly to all the men employed in the
8 collieries per week, then the three collieries which
9 are making it probably incurred the extra costs.

10 MR. GORDON: Far from it.

11 MR. MARSH: Would that be contrary to the
12 reason that you gave when you insisted upon having
13 the incentive bonus?

14 MR. GORDON: No. Now I said at the time
15 I insisted on an incentive bonus, that if the coal
16 was got we could afford to pay it, but if we did not
17 get the coal we could not even afford to pay the wages
18 we were then paying. That is what I said, and it is
19 still the facts.

20 MR. MARSH: That is my point.

21 MR. GORDON: And we can afford to pay the
22 bonus if the coal is produced.

23 MR. MARSH: Those are economic coal units?

24 MR. GORDON: I was talking across the field
25 as a whole, not of any particular one unit.

26 MR. MARSH: It puzzles me. Using your own
27 words, they make the bonus, you can afford to pay
28 the bonus, they are making the bonus and you say you
29 can afford to pay it. How does that mean they are
30 uneconomical?



1 MR. GORDON: These are not the only
2 arguments.

3 THE CHAIRMAN: I cannot have any controversy.
4 The very fact that they have accomplished what they have
5 to, but still remain the expensive mine is quite
6 consistent with the giving of the bonus. If there is
7 any decision to abandon, the cost of that particular
8 mine will be given; the actual cost.

9 MR. MARSH: Will you get those costs?

10 THE CHAIRMAN: Yes, I will, and will give them
11 to you.

12 MR. MARSH: You will Mr. Commissioner?

13 THE CHAIRMAN: If the decision is made to
14 close the mine.

15 MR. MARSH: You are going to set a precedent.

16 THE CHAIRMAN: I will set it then. You will
17 get them.

18 MR. MARSH: I thank you for it.

19 THE CHAIRMAN: That is if the mine is closed.

20 MR. GORDON: If the mines are going to close.

21 THE CHAIRMAN: But it has not been closed
22 yet.

23 MR. GORDON: No.

24 MR. MARSH: Could I ask you further questions
25 or would you rather wait until tomorrow morning?

26 THE CHAIRMAN: Perhaps if you have one more,
27 we can finish it tonight.

28 MR. MARSH: I have a few more.

29 THE CHAIRMAN: Then we will adjourn until
30 tomorrow morning until 9:30 o'clock.

